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SECONDARY EDUCATION AT THE PARIS EXPOSITION OF 1900

PROFESSIONAL OPPORTUNITIES IN A JUROR'S WORK

SECONDARY education in France constitutes a complete whole, taking pupils from the beginning of their studies to the degree of bachelor, which alone affords entrance to the superior state schools or liberal careers.

During the first half of the century secondary education was uniform for all, and was based on the study of Greek, Latin, and general history, rounded out by the elements of science. In 1852 a choice was given between a course in letters and one in sciences, with option from the fourth class, but the two sections continued to receive a share of literary instruction in common. Later the bifurcation began after the third class, but the separation of the two courses became absolute; the last classes in letters were the second, rhetoric and philosophy; in sciences the preparatory and elementary mathematics. In 1865 a new system was created called *special* for students preparing themselves for agriculture, industry, or commerce, which proved shorter and cheaper. Greek and Latin were excluded and the course extended through four years, preceded by a preparatory class. In 1872 a reform in classical instruction introduced modern languages and increased the study of French at the expense of the

ancient languages. A reform in 1880 introduced Latin in the sixth class and Greek in the fourth; extended French in all the classes, suppressed certain Latin exercises, and developed the sciences and modern languages. In 1881 special instruction was also reorganized for those having neither the taste nor the leisure to follow classical studies, but wishing a liberal education. The middle course of three years was preceded by a preparatory year and followed by the superior course, two years, which led to a special bachelor's degree. Like classical instruction, this was based on two so-called elementary years, following true primary classes. A revision of classical in 1885 and a reform in special in 1886 removed a danger to the former and obviated the disadvantage which the separation of the middle and superior entailed on the latter. Withdrawing the preparatory year and fixing the course at six years, a certificate was conferred at the end of the fourth year and the degree of *bachelor of special instruction* was endowed with some of the prerogatives attached to the other degrees. Pupils studied two modern languages, the *fundamental* during the entire course and the *complementary* during the last three years. In 1890 the classical was the object of a general reform to strike a fair balance between the development of intelligence and that of character and physical strength. Programs were lightened and simplified, a liberal discipline substituted for a repressive, and a new system of rewards and penalities organized. In 1891 the special in turn was entirely remodeled and replaced by a new type called *modern*, organized on the ideal prevailing in the reform of the classical.

Secondary instruction includes then at present two distinct types, working together to one end and similarly rewarded by the degree of bachelor; the classical characterized by the study of ancient languages; the modern characterized by a more complete study of modern languages and sciences. The two courses include the following common branches, which have not, however, in each the same relative importance: (1) the French language and literature, (2) modern language, (3) history and geography, (4) ethics and philosophy, (5) mathematical, physical, and natural sciences, (6) graphic and imitative drawing;

the special subjects in the classical: (1) the Latin language and literature, (2) Greek language and literature, (3) Greek and Roman history; in the modern: (1) principles of law and political economy, (2) bookkeeping, (3) history of civilization and of art.

They have a common division of two years (eighth and seventh) called elementary, which are preceded by one or more years called preparatory. At the close of the seventh an examination for promotion is given. On entering the sixth class the pupil chooses between the two courses and the work properly "secondary" begins. The sixth, fifth, and fourth years of both courses form the grammar division. The superior division comprises in the classical the third, second, rhetoric and philosophy classes; in the modern, the third, second and first. At the close of the fourth classical an examination for promotion is given, and at the close of the third modern pupils may obtain a certificate giving a résumé of their standing and indicating their rank in class. The rhetoric class (classical) and second (modern) form the basis of the examination for the bachelor's degree, first part. Candidates successfully meeting the first tests of the classical choose between the philosophy class and the elementary mathematics, the tests of which complete the requirements of the bachelor's classical degree, *lettres-philosophie*, or *lettres-mathématiques*, respectively. Candidates meeting the first tests of the modern choose between the first letters, the first sciences, or elementary mathematics; the tests of which complete the requirements of the bachelor's modern degree, *lettres-philosophie*, *lettres-sciences*, or *lettres-mathématiques*. In either classical or modern candidates may meet successively two tests of the second part and secure both degrees. Preparatory courses leading to the bachelor's degree *mathématiques élémentaires-superieur* or *mathématiques spéciàles* prepare for the superior state schools. The accompanying table shows the subjects and hours a week each is studied in both courses in preparation for the tests of the bachelor's degree.

Public secondary instruction is given (1) in the *lycées* founded and supported by the state, (2) in the *collèges* founded and

Comparison of subjects and hours in French secondary schools for boys. Classical.

The figures show the number of hours a week each subject is studied each year.

Divisions	Elementary			Grammar			Superior			Alternative		Hours	
Classes	Preparatory	8	7	6	5	4	3	2	Rhet.	Phil.	Math.	Total	
Subjects / Pupil's age		9	10	11	12	13	14	15	16	a	a	Phil.	Math.
French, philosophy [b]	9½	9	9	3	3	2	2	3	4	[b] 8½	[b] 2	53	46½
Modern languages, elective [c]	4	4	4	3	3	2	2	2	3	[c] 1	1	28	28
History	1½	1½	1½	1	1	2	2	2	2	3	3	17½	17½
Geography	1½	1½	1½	1	1	1	1	1	1½	[d] 2	[d] 1	11	11
Mathematics	1½	2	2	1	1	2	3	3	2	2	10	19½	27½
Science, biologic [d]	1	1	1	1	1		Phys. and Chem.			5	6	12	12
Drawing	1	1	1	1½	1½	1½	1½	2	2	2		15	13
Totals	20	20	20	10	9	5	5	4½	4	Latin		37½	37½
[a] Admitted to examinations at 18 years complete					1	6	5	4½	4	Greek		20½	20½
Promotion examination at the close of the 7th.				21½	21½	21½	21½	22	22½	23½	23	214	213½

Second promotion examination at the close of the 4th class. [b] Philosophy [c] Elective. [d] Biologic sciences one year later, for the

The tests for the degree are based for the first part on rhetoric; second part, first series on philosophy; second series on mathematics; third series on science.

Two certificates earned in examination one for the first part, the other for the second, according to the series chosen by the candidate, gives the bachelor's degree.

The classical diploma may be inscribed letters-philosophy, letters-mathematics, letters-science.

Modern

Divisions	Elementary			Grammar			Superior		Alternative			Hours		
Classes	Preparatory	8	7	6	5	4	3	2	Let.	Sci.	Math.	Total		
Subjects / Pupil's age		9	10	11	12	13	14	15	16	16		Let.	Sci.	Math.
French, philosophy [b]	9½	9	9	6	6	5	4	5	[b] 8	[b] 2	[b] 2	64½	55½	55½
Modern languages, elective [c]	4	4	4	6	8	8	6	6	[c] 2	[c] 2	1	48	48	47
History	1½	1½	1½	1½	2	2	2	2	5	3	3	19	17	17
Geography	1½	1½	1½	1½	1	1	1	1	1	1		11	11	10
Mathematics	1½	2	2	2	2	3	4	4		6	10	20½	26½	30½
Science, morals [d]	1	1	1	1	1	[d] 1	3	4	2	6	7	15	19	20
Drawing	1	1	1	3	3	3	3	3	[c] 1½	3		19½	21	18
Totals	20	20	20	1	Penmanship		Accounts		[c] 1	1		2	2	
Promotion examination at close of the 7th class.				22	23	23	23	Law	1½	1½	Econ.	1½	1½	
Certificates granted worthy students on completion of the 3rd class.					25		25		25½	23		201	201½	199

Students enter letters, science or mathematics, from the 2nd class. [d] Moral instruction

The tests for the degree are based for the first part on the 2nd class, one year later, for the second part, first series on the first class letters; second series on science; third series on math.

Two certificates earned in examination one for the first part, the other for the second, according to the series chosen by the candidate, gives the bachelor's degree.

The modern diploma may be inscribed letters-philosophy, letters-science, letters-math.

supported by communes with the help of the state. These receive boarders, part-time boarders, supervised day pupils, and day pupils. The *lycées* are in charge of a head-master and deputy; a general superintendent has charge of the discipline and a steward of the stores. Tutors look after the pupils and superintend their studies. The *collèges* are managed by a principal and their organization, ordinarily less complete than that of a *lycée;* is often more specially adapted to the needs of the district and to local requirements. Instruction is given in *lycées* by titular professors and the heads of courses; in *collèges* by professors of three ranks. The titular professors must possess the title of *agrégé;* the heads of courses and professors of the first rank must hold the license or an equivalent diploma; the second rank a bachelor's degree, and the third a primary grade. The primary and infant classes in *lycées* are intrusted to public instructors provided with the primary *brévet* and the certificate of aptitude. Promotion of the teaching staff is determined at the end of each year, and its discipline depends on the minister of public instruction, rector, academic council, and the superior council of public instruction. The order of studies is in the permanent control of the rector, academy inspectors, and general inspectors. Pupils are promoted on proof by marks or special examination.

Scholarships.—The state, the departments, and the communes support scholarships conferred preferably on children from families rendering services to the country or possessing insufficient means. They are of two kinds, the trial granted on provisional title and the merit granted on definite title. The trials are bestowed only on candidates successfully meeting a special examination, are granted for a year, and are renewable for a second year only. The merit is granted either to the candidate entitled to the trial scholarship whose work and fitness justify the honor or to the candidate successfully meeting a special examination in addition to attending a year's course in a *lycée* or a *collège.* The merit is not granted for admission to a class below the fifth.

Free secondary instruction is given (1) in private, lay or ecclesiastic institutions having their special professors; (2) in

boarding-schools, following in whole or in part the courses of public instruction; (3) in the small seminaries, which form, in fact, the preparatory school for the superior (ecclesiastic) seminaries, but they also give a true secondary instruction to pupils that are not preparing for the priesthood. The state through the academy inspectors exercises a superintendence of the morals, the hygiene, and the health of these free institutions, but its control does not directly extend to the instruction only so far as to prove that it is not opposed to morality, the constitution, and the laws. The question of state control over the free schools now occupies the attention of the legislature and the ministry.

Examinations.—The diploma of the bachelor's degree is conferred by the minister of public instruction on examinations before juries of the faculties of letters and of sciences. The examinations are held twice each year, one at the end, the other at the beginning of the academic year, their dates being fixed by ministerial decree. Candidates must have attained the age of sixteen and must deposit at the office of the secretary of the faculty, (1) a certificate of birth, (2) an application in his own handwriting, (3) for the first part, his selection of a modern language for examination, (4) for the second part, his choice of the series he wishes to meet. To these documents he can add his notebook to which some credit may be assigned in lieu of mistakes on written or oral tests.

No candidate can present himself for the tests of the second part till the first are successfully met, and the tests of each part are written and oral. The written tests eliminate candidates unprepared for admission to the oral. The successful candidates receive a certificate for each part and two certificates (one of each part) give the diploma of the bachelor's degree.

The written tests of the first part modern are (1) a German theme, and an English, Italian, Spanish, or Russian version or an English theme and a German, Italian, Spanish or Russian version made without dictionary or lexicon; (2) a French composition; the oral of the first part (1) the explanation of a French text; (2) the explanation of a German text, and the explanation of an

English, Italian, Spanish, or Russian text. German and English may alternate and the explanations of texts are accompanied or followed by a conversation in the modern languages which the candidate elects who may choose to be questioned on a third also; (3) questions on history and geography; (4) on mathematics; (5) on physics and chemistry. These tests are based on the programs of the second class. Candidates for the second part choose from three series. The written test of the first is a dissertation on a philosophic subject; of second and third a composition on mathematics and physics. The oral tests common to all are an interrogation on (1) philosophy, (2) current history, in common to the first and second, (3) geography; in common to the second and third, (4) mathematics; distinguishing the first (4) literature, (5) natural history; distinguishing the second (5) physics, chemistry, and natural history; distinguishing the third (3) physics, (5) chemistry. The tests of the first and second series are based on the program of the first class; of the third series on elementary mathematics.

The written tests of the first part classical are (1) a Latin translation, (2) a French composition; the oral of the first part (1) explanation of a Greek text, (2) of a Latin, (3) of a French, and the texts are chosen by the examiner from the works prescribed in the programs of the third, second and rhetoric classes, (4) the explanation either of a German or English text, or of an Italian or Spanish text, followed by an oral theme or conversation, (5) an interrogation on history and geography, (6) an interrogation on the elements of mathematics. The tests of 5 and 6 are based on the program of the rhetoric class. Candidates for the second part choose from three series. The written tests of the second part, first series are (1) a French dissertation on a philosophic subject, (2) a composition at the choice of the candidates on mathematics or physics and natural sciences; of the second series a composition on mathematics or physics. The oral tests of the first series are (1) an interrogation on philosophy, history of philosophy, philosophic writers, (2) on contemporaneous history, (3) on the elements of physics, chemistry, and natural history. The tests of this series are based on

the program of the class of philosophy. The oral tests of the second series are (1) an interrogation on mathematics, (2) on physics, (3) on chemistry, (4) on contemporaneous history, (5) on philosophy. The tests for this series are based on elementary mathematics. The third series will be more specially devoted to physics and natural sciences, and a later regulation will determine the programs and special conditions of the series. The time allowed for the written tests of the first part are (1) translations, three hours; (2) French composition, three hours; of the second part, first series (1) dissertation or composition on philosophy, four hours; (2) composition at the choice of the classical candidates, either on mathematics or on physics and natural sciences, two hours; second and third series, composition on mathematics and physics, four hours. The oral tests are public and at least three fourths of an hour is given each candidate. Each test is graded by a mark varying from 0 to 20. Points are assigned both the written and oral tests. In the first part classical, the two written tests of three hours each have 20 points each; the eight oral of three fourths of an hour to each student average 20 points each, total 200, time of examinations, six and three fourths hours, minimum requirements 100 points. In the second part the first written test of the first series has 40 points and four hours, the second 20 points and two hours; the three oral tests have twenty points each and three fourths of an hour, total points 120, time of examinations, six and three fourths hours, minimum requirements 60 points. In the second series the written test has 40 points, four hours, one oral has 40 points, the other four 20 points each and three fourths of an hour; total points 160, time of examinations, four and three fourths hours, minimum requirement 80 points.

In the first part modern the two written tests of three hours each have 20 points each, the seven oral of three fourths of an hour aggregate 120 points, total points 160, time of examinations six and three fourths hours, minimum requirements 80. In the second part the written test of the first series has 20 points, of the second and third 40 each, and four hours' time for each. The five oral tests of the first series have 20 points each and

three fourths of an hour, total points 120, time of examinations four and three fourths hours, minimum requirements 60 points. The five oral tests of the second series aggregate 140 points and three fourths of an hour, total points 180, time of examinations four and three fourths hours, minimum requirements 90 points. The five oral tests of the third series aggregate 120 points and three fourths of an hour, total points 160, time of examinations four and three fourths hours, minimum requirements 80 points.

Thus the diploma can be secured by two examinations a year apart, and the classical degree *Lettres-philosophie* requires 160 of of the 320 points, with thirteen and one half hours for the examinations; classical *Lettres-mathématiques* requires 180 of the 360 points, with eleven and one half hours for the examinations. The modern *Lettres-philosophie* requires 140 of the 280 points, with eleven and one half hours for the examinations; the modern *Lettres-sciences* requires 170 of the 340 points, with eleven and one half hours for the examinations; the modern *Lettres-mathématiques* requires 160 of the 320 points, with eleven and one half hours for the examinations.

The certificates of each part bear record to the student's standing, pass when 50 per cent. of the points are attained, satisfactory 60 per cent., good 70 per cent., very good 75 per cent.

The fees for the two examinations are 60 fr., for the two certificates 20 fr., for the diploma 40 fr., total 120 fr., or $24.

The bachelor's degree, secondary modern, affords the same advantages and prerogatives as the other bachelor degrees for admission to the competitive examinations or for entrance to different institutions, among which are the *Écoles nationales d'agriculture*, *Institut agronomique*, *Écoles vétérinaires* under the ministry of agriculture; for the École des hautes études commerciales under the ministry of commerce and industry; the École Polytechnique, École de Saint Cyr under the ministry of war; Licence és sciences, Pharmacien de 1re classe et de 2e classe; École normale supérieure (Sciences) under the ministry of public instruction.

The bachelor's degree, classical, affords the same advantages and prerogatives as the other bachelor degrees for admission to the competitive examination or for registration in the faculties of the university, (1) theology, (2) law, (3) medicine, (4) pharmacy, (5) letters.

Rollin.—This school is a good illustration of the *collèges* of France. Historic associations make it conservative, and a modern spirit places it abreast, if not ahead, of the youngest secondary school. Located in the heart of Paris, under the influence of that famous center of education, it has been called the Lycée of the City of Paris.

Headmaster Rousselot, in a monograph prepared for the Exposition of 1900, traces the interesting history of St. Barbe and the foundation of the municipal college Rollin. He assured me that the *collège* differs in no particular from the *lycées* save that the former is maintained at municipal expense, the latter at national. Almost all the *collèges* of Paris originating in the middle ages were founded by priests. At that time every learned abbé who had acquired any notoriety as an educator aspired to collect his pupils around him in such a school. Usually poor, he was obliged to give them at little expense food and shelter, and whenever his resources permitted to add assistants of merit. Such was the beginning of St. Barbe-Rollin in 1430. The revolution of 1789 interrupted the course of studies. In 1791 the buildings were pillaged and the last occupants put to flight. After that tempest St. Barbe became a college of sciences and arts and at the same time on the débris of the former St. Barbe another sprang up, the future Collège Rollin. An imperial decree in 1812 transferred to it a former convent and made it one of the four lycées ordered by decree of 1811. In 1826 Charles, by the grace of God, King of France and of Navarre, ordered that the city of Paris acquire the property of the former college of St. Barbe. The revolution of 1830 marked the college by a change of title, and "was it not the greatest good fortune that placed a university institution under the patronage of a man whose name is so cherished by the university—Rollin?" Change of name and modification of rules

were established in 1831 by Louis Philippe. The War of 1870 found pupils in the college although daily papers announced that the buildings had been entered and pillaged. An item from the school journal states that the pupils present in Paris pursued the course as day scholars to the 15th of March with a single interruption from the 9th to 28th of January, while the bombardment redoubled in intensity and nine shells fell within the enclosure, three of which struck the buildings.

The school numbers 230 boarders, 300 part-time, and 750 day pupils, total 1280. The classical instruction did not suffice for so diverse a pupilage, and a modern course is given with a transition class from the modern to the classical, which permits pupils to change their courses with the least possible loss of time, an adaptation that shows the influence of the American school system on the secondary schools of France. Another marked influence is shown in the same institution by the organization of the pupils for athletic sports. The school embraces three colleges called respectively the minim, the junior, and the superior. The classes from infant to the 6th modern occupy the minim college, the junior and superior being assigned to classes from the 5th modern and 6th classical through the philosophy. The old dormitories are no longer used by the boarders, but a chamber is now provided for each pupil, a model of which was shown at the Exposition. There is a good gymnasium, not large, provided with modern apparatus. Facilities for individual laboratory work are provided in chemistry but not in physics, as the cost of organizing and maintaining the latter is thought to be too great. The physical apparatus for the teacher's use is excellent as well as the biologic. Professors instruct from thirteen to fifteen classes weekly. The day's work begins about 8:30 in the morning, and closes at 10:30, with an additional hour for conference. The same time is devoted to the afternoon session. The transitional course that enables pupils to change from the modern to the classical course as found in practical operation in this school will interest American readers.

COURSES BY YEARS, SHOWING TRANSITION FROM MODERN TO CLASSICAL ELEMENTARY, CALLED MINIM

FIVE CLASSES OR YEARS

1. Infant, 2. Primary, 3. Ninth, 4. Eighth, 5. Seventh

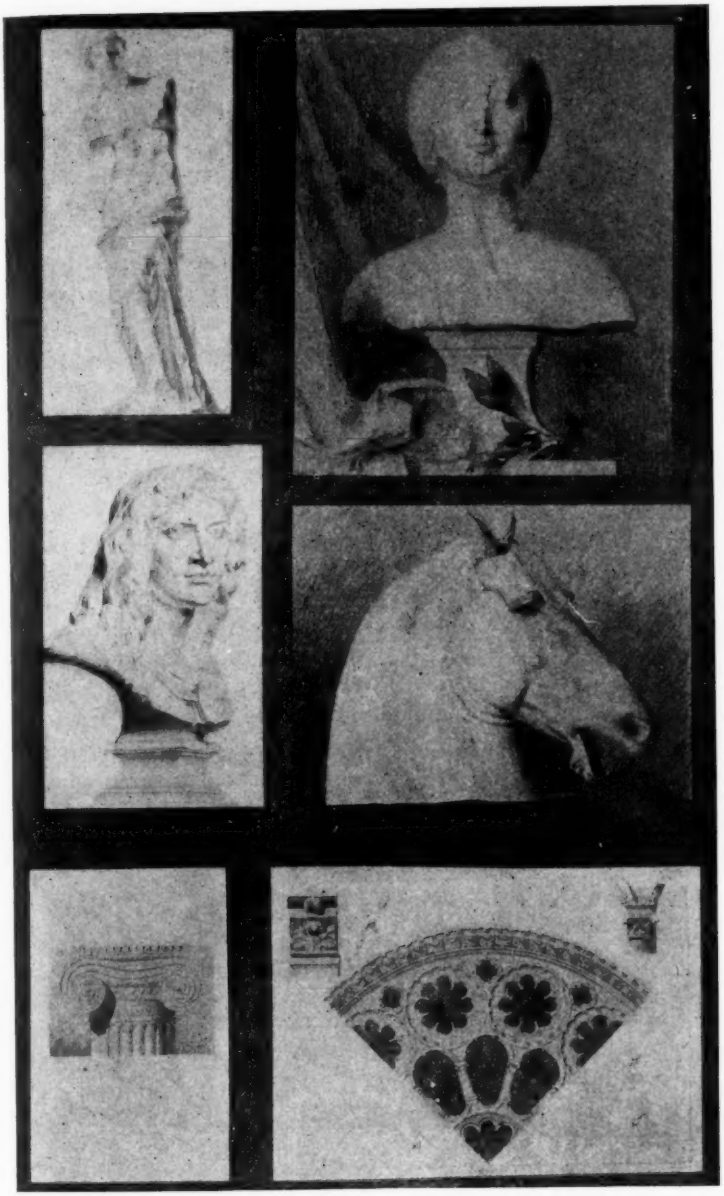
Year	Modern Class	Grammar	Classical Class
6	Sixth	Transition from	Sixth
7	Fifth	modern to clas-	Fifth
8	Fourth	sical course	Fourth
		Superior	
9	Third	First	Third
10	Second (letters)	Second	Second
11	First (science)	Rhetoric (letters)	Rhetoric
12		Philosophy or mathematics or science	

The accompanying view from Rollin's exhibit gives a good idea of the drawing instruction in secondary schools.

A bridge to span the chasm between primary and secondary education in France may be found in the superior primary school, Jean Baptiste Say, where a supplementary course prepares the pupil for the examinations of the modern bachelor's degree.

The municipal college Chaptal, founded in 1844 by the city, is specially planned for young men preparing for industrial, agricultural, or commercial pursuits. Its course of eight years provides the subjects devoted to commerce, industry, and agriculture and prepares its pupils for the polytechnic school, the superior normal, St. Cyr, as well as the central school of arts and manufactures. It provides for 300 boarders and 1100 part-time boarders and day pupils.

The Lycée Condorcet is a good illustration of the secondary school admitting day pupils and affording classical instruction only. Occupying two buildings in different blocks of the city, the junior college accommodates about 600 pupils, including the first six classes; the superior about 1000, including the pupils from the fourth class through rhetoric and philosophy. Pupils of the third class who had studied English for several years were doing no better work than pupils of first-year French in our high schools near the close of the first year. The



SECONDARY EDUCATION-DRAWING FROM COLLÈGE ROLLIN

teacher spoke the English alone in class, and the pupils to a greater or less extent. They recited from memory such selections as "Inch Cape Rock," but little time is given to grammatical construction, and the conversation is lame and halting. The scansion is good, but pronunciation and accent faulty. The English of this third class in a classical secondary school seemed little if any better than that of the second class of the superior primary referred to above.

Secondary school for girls.—A voluminous publication of nearly 1300 pages, prepared for the Exposition of 1900 by M. Camille Sée, begins with the statement that the sole aim of this publication is to give strangers coming from all points of the globe most remote to admire the conquests and the progress of the human soul—a knowledge of how France created and organized a system of instruction which twenty years ago was wholly unknown to her laws. In 1880 secondary instruction for girls had no establishments in all France. In 1900 there were twenty-eight colleges with 3563 students, forty lycées with 8431 students, and the superior normal school for girls with 63 students, a total of sixty-nine institutions and 12,057 pupils. The purpose of these schools can be given no better than in the words of M. Sée himself: "We would train our girls to be simple, modest, and learned. We would fit them for their life's work to be mistresses of homes, true wives and good mothers. We would avoid peopling our homes with pedants." To appreciate the importance of this work it is well to recall the condition of such instruction when the chamber of deputies first listened to the law proposed by M. Sée. The schools founded by private industry or by religious bodies were few. Such education as existed gave only the most elementary instruction. When a school assigned to its program the work of secondary instruction it was rare that the program was other than a paper statement. Instruction was not given, or it was of such a character as to be worthy of suppression. The laic schools were very inferior to the church schools, and they were wanting absolutely in a large number of localities.

And what was the model that guided this legislation? Naturally secondary instruction for boys. That is, they established a scheme of secondary instruction to which boarders, part-time boarders, and day scholars had free access with a coördinate teaching force and parallel courses of study. The measure introduced by M. Sée became a law under the administration of such distinguished Frenchmen as Gambetti, president of the chamber of deputies, Léon Say, president of the senate, and Grévy, president of the republic.

That this development was due to the influence of the American school system on the earnest workers of France, appears from the report of M. Sée to the chamber of deputies, and that the French people learned the lessons taught by their expositions, is evidenced by the creation of this new school system. "No country," he says, "began so early nor has done more and better than the American republic, which is permeated by the thought that the republican form of government needs all the power springing from education. The honorable director of the section of education of the United States at the Universal Exposition of 1878 had this thought of Montesquieu's engraved in letters of gold in a most conspicuous place, with the added statement that public instruction is free in all of the states of the Union."

After a statement of the American school system Mr. Sée's report continues as follows:

> In France we give a complete general instruction only to those destined for liberal careers. Others at an early age may enter the superior elementary school, special secondary school, or a school of trades. They are compelled thereby to adopt a career long before the knowledge of their tastes or aptitudes are developed, and such pupils are condemned for the rest of their lives to all the inconvenience and to all the evils of a general education incomplete and inadequate.

Twenty-one years after the preparation of that report M. Sée, in the United States section of the educational Exposition of 1900, which called forth the warmest commendations of the French members of the jury of award, said:

> I have the profoundest admiration for the American school system, and, while I ask no recognition for the work in the French secondary schools for

Comparison of subjects and hours in French secondary schools for girls and primary normal schools

The figures show the number of hours a week each subject is studied each year

Divisions	Infant	Preparatory			Secondary					[a]		
Classes	Infant	I	2	3	I	2	3	4	5	6	Total hours	
Subjects	Pupil's age 8	9	10	11	12	13	14	15	16	17	Let	Sci
French	8½	6½	6½	6½	5	5	3½	3	2	L 3	47½	44½
Modern languages	2½	2½	2½	2½	3	3	3	[b] 2 3	[b] 2 3	5	33	33
History	1	1	1	1	2	2	2	2	2	L 2	16	14
Geography	1	1	1	1	1	1	1	1	[c] ½	L 2	10½	8½
Mathematics		2½	2½	2½	2	2	2	[d] 2	[d] 2	S 4	17½	21½
Science		1½	1½	1	1	1	2	2½	3	S 4	13½	17½
Total	11	14	15	14½	Morals		1	1	[d] 2	3	7	7
					Sewing		[b] 2	[b] 2	[b] 2 [d] 2	[b] 2	12	12
					Drawing		[b] 2	[b] 2	[b] 2 [d] 2	[b] 2	12	12
					Solfeggios		[b] 1	[b] 1	[b] 1 [d] 1	[b] 2	7	7
					Gymnastics		[b] 1½	[b] 1½	[b] 1½ [d] 1½	[b] 2	9½	9½
					Literature		General [f]		1	L 1	3	2
					Total		20½	20½	21	24	24	24	188½	188½

[a] Supplementary year for admission to Normal on competitive examination. Time of 5th given Letters (L) Science (S).

[b] Minimum

[c] Common law

[d] Elective.

[e] Psychology applied to morals and education.

[f] 2 conferences on domestic economy and hygiene

An oral promotion examination admits to the first class and is based on the middle (moyen) course of the compulsory period.

The promotion examinations to the 2nd, 3rd and 4th classes are oral and are based on the programs for the 1st, 2nd and 3rd years respectively and a certificate is given all students satisfactorily meeting the tests of the 3rd class for the promotion to the 4th

The promotion examination from the 4th to the 5th is oral and based on the program of the 4th class obligatory and elective. A diploma is given all students satisfactorily meeting an examination at the close of the 5th year in writing based on the subjects of the 4th and 5th years; oral based on all the obligatory subjects and the electives chosen by the student at least two.

Subjects and hours in French primary normal schools

	For men					For women				
Classes	Hours of preparation in primary		I	2	3	Hours	Pri	I	2	3	Hours
Subjects	Student's age	E and S	16	17	18	Total	E and S	16	17	18	Total
Literary	Morals, psychology, education	3	2	2	2	6	3	2	2	2	6
	French	7 4	5	4	4	13	7 2	5	4	4	13
	History and civics	4	3	3	3	9	3	3	3	3	9
	Geography	2 1	1	1	1	3	2 1	1	1	1	3
	Penmanship	2 3	2	1		3	2 2	2	1		3
	Modern languages	8	2	2	2	6	9	2	2	2	6
Scientific	Mathematics	3 4	3	4	4	11	2 2	2	2	2	6
	Physics and chemistry	6	2	2	3	7			2	2	4
	Natural science and hygiene	2 1	1	1	1	3	3 0	1	1	1	3
	Drawing and modeling	2 1	4	4	4	12	2 1	4	4	4	12
	Agriculture (theory)	3		1	1	2				1	1
Other	[a] Manual training and agriculture	2 4	5	5	5	15	2 4	[a] 5	4	2	11
	Gymnastics	18	3	3	3	9	2 5	2	2	2	6
	Singing	9	2	2	2	6	9	2	2	2	6
[a] In sewing, housekeeping and gardening	Total	269	35	35	35	105	261	31	30	28	89

girls, I wish to accord suitable recognition to the secondary schools of the United States.

The accompanying table gives the subjects and hours devoted to each per week throughout the course of the secondary schools for girls and the primary normal schools.

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(To be continued)

MORE PROFITABLE HIGH-SCHOOL CHEMISTRY

SCIENCE is usually regarded as the exact and systematic statement of our knowledge of a subject. If we accept this definition, the study of chemistry becomes the acquisition and arrangement of those facts and principles which give adequate expression to this branch of science. The trend of science teaching, in the best high schools, however, is toward a deeper, more liberal and vital conception. To the modern teacher whose work is a potent factor in the problem of education, science is the investigation, interpretation, and comprehension of truth. And the study of a single subject like chemistry is not merely the collecting and classifying of facts, however fruitful that task may be, it is an ardent search for truth.

A decade ago chemistry was taught in high schools almost exclusively by a text-book, supplemented by frequent lectures which were often illustrated more or less by experiments. But as the broader conception of science arose, the verbal method began to be replaced by the laboratory method. Pupils ceased merely to read and listen, and began to work and think. So rapid has been the transition that today in many high schools the major part of the work in chemistry is done in the laboratory.

Experience is gradually showing, however, that no single channel of instruction is applicable to chemistry. Some phases demand one kind of treatment and some another. Often the successful teaching of different parts of the same topic requires widely different methods. It is a fact too often overlooked by a zealous teacher who is provided with a generous equipment that, while many principles may be profitably developed in the laboratory, there are other principles which are actually obscured by experimental treatment.

The natural method of teaching chemistry recognizes the laboratory as the center from which profitable instruction proceeds, as a guiding star for completing a scientific journey, but

not as the whole celestial sphere. This method utilizes the supreme pedagogical value of other factors besides individual laboratory work, *e. g.*, brief lectures, quizzes, numerical problems, essays, excursions, written reviews, and collateral reading. It considers the whole being. It recognizes the sensibility and the will as well as the intellect. It emphasizes the intimate and sympathetic relation of soul, mind, and body.

This method is composite and cannot, therefore, be rigid. The teacher of chemistry should have time enough to secure results which are at least commensurate with the time, money, and energy expended. Statistics gathered by the New England Association of Chemistry Teachers show that the better high schools in Massachusetts devote approximately five periods a week during the school year to chemistry, and this fact is corroborated by data furnished by the State Board of Education. In the judgment of the writer this time is adequate, provided it is placed at the sole disposal of the teacher of chemistry. He should be allowed to use the time allotted to his department as the state of his classes demands. His program should be flexible. That is, he should not be obliged to have a lecture, or a recitation, or a laboratory period at a fixed hour simply because the program in September apparently necessitates this arrangement, nor because another teacher would like his lecture room for unexpected work. The teacher of chemistry ought also to have at least one double period a week. The actual economy of the double period can scarcely be determined. It permits consecutive mental work, avoids troublesome and costly interruptions, allows time for needed rest, calm work and consultation between teacher and pupil. Statistics recently gathered, show that of forty-six high schools in Massachusetts twenty-six had *no* double period for chemistry.

The teacher of chemistry needs reference books. Statistics show a deplorable lack of this species of teaching material. Of forty-two high schools in Massachusetts twenty-four had no distinct chemical library, and with few exceptions the collection of books in the remaining schools was meager. Reference books are essential in studying chemistry. All facts are not recorded

in a single small book. Indeed, certain facts should not be in the book used by the pupil. Lists[1] of suitable reference books are available, and ten dollars will purchase several helpful books, to which more may be easily added each year.

Finally the teacher of chemistry needs more leisure time. It is a mistaken idea that a laboratory teacher is not working unless he has a class before him every minute. A chemistry teacher of all others needs time to arrange the workshop of his class, time to consult with individual pupils, time to repair, clean, arrange, and replace apparatus, time to clean up what pupils and janitors will not do, time to mix solutions, put them in properly labeled bottles, and the bottles in the customary place, time to correct laboratory notes and see that the pupils understand the corrections, time to arrange lecture experiments and remove the unsightly results before the room is again used, time to visit with classes the neighboring shops and manufactories which illustrate the industrial phases of chemistry, time to read current scientific literature, time to *rest* physically and mentally so that he may come daily to his classes with that mental poise which is essential to successful teaching.

The source of profitable instruction in chemistry is undoubtedly the experimental work of the pupil. But the psychology of experimental science has not been adequately studied. I may be pardoned then if I briefly discuss from a psychological standpoint the natural or composite method, above mentioned in its relation to "more profitable high-school chemistry."

Laboratory work is concrete labor. A laboratory is a workshop, where a pupil must use his hands as well as his head. It is a place where there may be a harmonious combination of mental and manual labor. Now such work cannot be shirked mentally. In studying mathematics, especially geometry, the mind easily wanders. The case is the same with history, and so much so that the present methods of teaching history are largely those used in the laboratory. But when the mind is following an experiment in the laboratory, it cannot shirk. Something is

[1] The L. E. Knott Apparatus Co., 16 Ashburton Place, Boston, Mass., will send such a list on request.

constantly happening; the mind is carried quickly from concrete to concrete. Various instruments must be arranged, materials collected, operations started, watched, controlled and stopped. Things must be seen and done. The laziest mind must think of something; it may not be the most important thing, but it must think.

Again, laboratory work relieves mental fatigue. Pupils in most of our high schools are crowded with purely mental work. They are under a constant mental strain. Many are unconscious victims of a disease rightly called brain fatigue, not because they have used their brains too much, but too long on the same kind of mental work. Laboratory work is restful, not merely because it provides an interesting change from books, but because the eyes, hands, nose, in fact all parts of the body are in harmonious action. No part is pulling another. There is a minimum amount of tension. Each organ bears a share of the nervous burden. Harmonious action is freedom. Cheerful, interesting work is the remedy for fatigue.

Laboratory work produces the highest grade of reactive conduct. Reception is followed by reaction, and impression produces a corresponding expression. Teachers are apt to forget that the natural outcome of thought is action, that knowledge is incomplete without action, that all motor activities are the expressions of thought. Expression is necessary to life. The mind grows through the exercise of its faculties, just as a muscle grows through its use.

It is no wonder that in many high schools chemistry is not more profitable. If the teacher of chemistry or the principal does not favor laboratory work, if the teacher persists in explaining in the class room what the pupil can think out in the laboratory from his own data, if the program restricts the laboratory work to a pitiable minimum, then it is folly to expect the course to yield mental results. There must be enough laboratory work to teach the mind not to shirk. Heads cannot learn to work in continuous sympathy with hands, if hands have little or nothing to do. If, on the other hand, most of the work must be done in the laboratory and very little time for various reasons can be

devoted to the subject outside the laboratory, then the pupil likewise suffers a distinct mental loss. His experimental results receive no mental stimulus and are soon forgotten. Laboratory results to be profitable must be driven home by searching questions, brief lectures, written reviews, and numerical problems. The work should be so conducted that pupils cannot truthfully say, as a boy once said regarding his work in physics: "Oh, we just measure, that's all."

Again, if the double period of laboratory work is too long, if there is no opportunity for pupils to sit down in the laboratory to write notes, consult reference books, or perform slow experiments, if the directions for performing the experiments are so vague, or brief, or long that their interpretation requires excessive mental energy, then mental fatigue will be increased, not neutralized. The laboratory will not afford that mental rest which it is designed to provide, and possibly both mind and body may refuse to act normally.

Finally, if the laboratory work is inadequately supervised owing to large divisions, program restrictions, or pedagogical inefficiency, then the reactive conduct will be of a low, perhaps the lowest, grade. The pupil who is called upon to be doing something constantly should be stimulated by an environment which will permit him to do the right thing. Good expression cannot come from bad or meager impressions. Teachers of chemistry who are content to let the laboratory run itself, who see no psychical need of helping a confused pupil to regain his mental poise, who do not constantly realize that beginners are as prone to believe error as truth—such teachers are unprofitable servants of the science of chemistry. A magnificent pedagogical opportunity awaits those teachers who believe that it is their personal contact with pupils working in the laboratory under favorable conditions which begets good habits of observation, teaches the difference between accuracy and vagueness, inspires a belief in the utter inadequacy of all abstract verbal accounts of real phenomena, increases mental self-reliance and independence, inculcates honesty in little things, and shows that harmonious action of head and hand is mental rest.

The interrelation of curiosity, interest and attention has an important bearing on instruction in chemistry. Pupils see little value in distasteful studies. Indeed, for them, such studies have no mental value, if the dislike continues. Beyond question there are times when pupils should be made curious. Psychologically, they should receive impulses toward better cognition. But curiosity is like a newly-driven oil-well. Its treasures often burst suddenly into the air as soon as the drill pierces the crust and are lost unless the skillful master is at hand to gather and ultimately refine the crude product. At best curiosity is an unscientific stimulus. It may serve a purpose, but it can never control the stream it bridges. The problem is to lead pupils from indiscriminate curiosity in things to a philosophic grasp of principles, from pleasure in mere observation of striking facts to esthetic contemplation of the truth. The thoughtful teacher of chemistry arouses this dormant, unbridled curiosity by using short, striking experiments, stimulates it by interesting information, by collateral reading, by excursions to museums and shops, or by simple numerical problems, and thereby leads the pupil to act from rationalized curiosity, that is, from normal interest.

The transition from curiosity to interest is a crucial test for the pupil and a critical time for the teacher. The passage is sometimes imperceptible, alas, to both teacher and pupil. Some pupils never pass from curiosity to interest. Too often, a thoughtless word, an unintentional but definite oversight, an inexcusably flippant attitude on the teacher's part may upset the delicate poise of the pupil's mind and turn to permanent indifference what might have become lifelong interest. This may be true of all subjects, but it is especially true of chemistry, since the teacher and pupil are closely associated in the laboratory and the work by its very nature demands continued consultation. Pupils must be studied as units, their complete mental life should be known, and just before they reach the parting of the ways, as they do day after day, the teacher should never fail to point them unerringly into that path best adapted to their total development.

Chemistry is admirably suited to rationalize curiosity, and

thereby lead the pupil to act from philosophic interest. Disconnected observations may be easily correlated, examined, tested, and judged by the pupil. The field is spread before him, seed is provided, and it remains for pupil and teacher to plant the seed, nurture it, and gather the ripened product. Laboratory work supervised from the broadest standpoints will lead pupils to abandon insidious self-indulgence in merely observing and induce them to act from scientific insight, critical testing and personal conviction.

There are two kinds or grades of interest, native and acquired. Most pupils have both, delicately mingled, though often latent. Native interest is not always focused on the most helpful subjects, hence pupils should be urged, perhaps indirectly compelled, to study those subjects which foster the growth of acquired interest. They should be induced to associate subjects that are primarily uninteresting with other subjects in which interest already exists. The most fruitful fields of study are those which not only educe native interest but also create acquired interest. Chemistry is preëminently fitted to arouse native interest. It presents at the outset work which invokes examination, explains natural phenomena, and answers questions about common things. This is especially true in the application of chemistry to many industrial operations, to medicine, to certain phases of photography and voltaic electricity, to the composition of rocks and minerals, to the constituents of the atmosphere and to the properties of acids and alkalies. But chemistry should not stop here. To be intellectually profitable, it should lead the pupil to acquire an interest in the laws underlying these natively interesting topics. That is, an opportunity should be provided to study the phenomena from the causal standpoint, to generalize from observed facts, to read the historical setting of the discovery and growth of the apparently new observations and to fix permanently in mind any mathematical transformations involved in the chemical changes.

Interest is inevitably accompanied by attention. A natively interesting object arouses passive attention, that is, attention requiring no deliberate, conscious effort. It is often called

involuntary attention, and is the more common kind. Indeed, some pupils seldom pass beyond this mental stage. They never will to think. They are mere passive recipients. It is doubtless true that many pupils are mentally suspended. Their native interests are pampered so long that they become unfitted for much mental work beyond passive or desultory observation. It is voluntary attention which is essential to complete psychical life. We must will to think, if we are to live. Professor Ladd says: "What I will to think becomes interesting and attracts further attention to itself." Voluntary attention is really a momentary act. The total time consumed by voluntary attention in most of our mental lives is short, but its importance in the attainment of knowledge is almost incalculable. It wheels the forces of the mind into line, and then the passive attention leads them along until another voluntary act is necessary, and so on. Pupils need to see the value of voluntary attention, the inestimable value of being able to complete with success an experiment requiring skill, patience, and confidence. No means, even the simplest and apparently the most insignificant, should be spared to arouse voluntary attention. There is a class of experiments in chemistry which simultaneously demands and cultivates voluntary attention. I refer to quantitative work. The judicious introduction of experiments involving exact weighing and measuring will make a course in high-school chemistry more profitable. Consider, for example, the determination of the weight of a liter of oxygen. A test tube containing a mixture of manganese dioxide and potassium chlorate is attached by a sickle-shaped tube to a large bottle filled with water; a delivery tube passes from the bottom of this bottle into an empty bottle. The test tube and the empty bottle are weighed before and after the operation. If the test tube is heated, oxygen passes into the full bottle and forces water over into the empty bottle. The loss in weight of the test tube is the weight of the liberated oxygen, the gain in weight of the catch bottle is equivalent to the volume of oxygen. From these two results the weight of a liter of oxygen is easily calculated. This experiment is absorbingly interesting. The water falls in

one bottle and rises in the other throughout the heating, and the mixture in the test tube changes in color and consistency. Moreover, the whole operation, exclusive of calculations, requires only about half an hour. But it arouses curiosity, stimulates native and acquired interests, and demands voluntary attention. It covers the whole psychology of laboratory work. In no case where this experiment has been done in the writer's laboratory has there been the slightest lack of interest or attention. Furthermore, the arithmetical computations, which are somewhat complicated, are willingly worked out, because pupils are voluntarily interested in the final result ; they want to know just how much their liter of oxygen weighs. And it may be said in passing that the results are uniformly accurate—the class average varying only a few hundredths of a gram from the theoretical value. If, on the other hand, the pupil is finding the ratio in which magnesium and oxygen combine, his attention may flag, because this experiment has uninteresting stages. In other words, it demands too continuous voluntary attention, so much, in fact, that in some cases it has proved beneficial to allow the pupil to perform simultaneously other and more interesting experiments. Nevertheless this experiment furnishes valuable training. After a few quantitative experiments have been performed, the importance of such work becomes apparent not only in similar experiments, but also in the general laboratory work. It simply means that exact work cultivates voluntary attention. In other words, it teaches mental self-reliance, activity and accuracy. Again, exact experiments lead naturally to fundamental laws, hence the results of laboratory work furnish a sound and attractive basis for the discussion of chemical theory. They likewise give zest and interest to the often unwelcome task of solving numerical problems, since the problems can be based on the experiments. I regard simple quantitative work as a most fruitful field for teachers of chemistry to cultivate. It is true such experiments require a modern book and adequate apparatus, but these essentials are available at a cost which is much less than would be suspected. The mental results of exact experiments are produced by careful, patient, sympathetic,

inspiring supervision of each pupil's total work. Such teaching takes time, but no more time than any effective teaching.

It was thought about half a century ago that certain nerves checked the action of certain muscles. This is true, but it is a narrow interpretation of a more general function of the nervous system. This conception of arrest, as it is often designated, has been extended to cover our mental life, irrespective of nerve stimulus as such, and is called inhibition. It is not necessary that an inhibiting idea be especially strong, for here, as elsewhere, the mental machinery is delicately constructed. A strong motor idea may be easily and completely inhibited by a simple and apparently foreign idea. Faint impressions on the confines of consciousness may throw the strongest idea entirely off the track. Some trivial observation may upset a thought which is seeking expression, and either arrest it completely or so modify it that the final judgment is delayed, or suspended, or even hopelessly abandoned. Obviously, pupils need to be prevented not only from purely impulsive action on one hand but also from cowardly inaction on the other. They should not be allowed to yield to unwarranted inhibitions, but should be constantly urged to rational mental action.

Chemistry provides a grand opportunity to train the mind to be judicial, to consider calmly, deliberately and persistently Day after day conditions arise in the laboratory which spread before the pupil's mind the whole field of consciousness upon which decisions must be based. He must not only observe phenomena, he must also interpret them. Moreover, his conclusions are rigorously tested, and hence he soon realizes that observations must be accurate and complete, and that conclusions must be honestly made. Experience, dearly bought, tells him with unerring voice not to yield to reckless impulse or foolish inhibition.

If chemistry is to be profitable, it is obvious that experimental work should be so conducted that the mind can travel without many inhibitions from the object of the experiment through the manipulation to the conclusion. It is a deplorable fact that many books in chemistry now in use absolutely ignore these

fundamental psychological principles. Some books deliberately tell the result of the observation before the pupil has an opportunity to observe. A few scorn experiments with titles. Consequently there is nothing to indicate the relation of experiments which constitute a unit; the beginner is not even started on the right mental track. Others inject needless, incongruous questions into the midst of the directions for manipulation. And some even introduce topics which should seldom, if ever, be considered out of the class room. A favorite topic of this sort is the equation. In many books the text too often tells the whole story. It is, to be sure, almost impossible to avoid telling something in a combination of text and experiment, but the less told the better. Again, most of the books fail to carry the experimental results to a definite end. The student is left suspended, he is robbed of an inestimable mental exercise, to say nothing of being compelled gradually to lose serviceable information. Moreover, some of the books, especially some which are often quoted, are too easy for both teacher and pupil. It is a temptation, especially to a busy teacher, to use a book which "runs itself." Such a lapse of good faith takes little or no time, the pupils make no complaint, and the results are apparently permanent; indeed, much information seems to have been gained by the pupil. It is doubtless true that the average pupil does accumulate a few isolated facts, but at what a tremendous mental expense! The mind is pointed to no introductory guiding star, to no suggestion which will lead it from mere curiosity to fruitful interest and finally to voluntary interest. Worst of all, the mind is prevented by numerous insidious inhibitions from acting calmly, continuously and logically. If experiments are to be profitable, they should be so expressed and arranged that the average pupil cannot fail to grasp at least the title, the exact method of procedure, the essential observations to be made, and the probable conclusion which such observations will permit. The directions must be specific, complete, and accurate. Skillfully worded questions will educe the desired observations, but such questions should not be inserted where they will seriously interrupt the continuity of the thought. Books constructed on

these conceptions are rare, but enough exist to render our high-school chemistry more profitable, if they are used with an honest determination to educate the pupil.

It is not too strong to say that the real educational value of chemistry is largely conditioned by the mental equipment of the teacher. His problem contains two unknown but determinable quantities — himself and his pupils. Success depends upon the teacher's knowledge of his own psychological and spiritual life, as well as upon the discovery of mental crises in his pupils. He must create an atmosphere which fosters calm, deliberate, confident, untrammeled mental ability. Each day, as he lives with the souls who come to him for inspiration, his one purpose, shining brightly in the midst of the toil, the routine and the incessant effort, should be to lead them to investigate, interpret, and comprehend the truth. He must be the truth, for "what we are shall teach."

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THE ASSIGNMENT OF ESSAY SUBJECTS

"WHATSOEVER a man soweth that shall he also reap," is nowhere truer than it is in the teaching of English composition, so far as bad reaping is concerned, at any rate. On all sides we hear that the teaching of writing does not succeed in teaching students to write, and everywhere we see the efforts that are being made to get better results. But there is something more in the quotation than the lugubrious warning writ large; there is the promise, only recently discovered and applied by teachers of composition, that a man's *good* sowing shall be rewarded — to make the application at once — that a proper preparation for excellent writing will be followed by excellence in writing. It is this hopeful word that is to be the theme of the present paper. The proper preparation can mean only one thing of course, the giving of such a subject, and the putting of the student into such relationship with it, as will make him eager to write and convinced of the necessity of writing. In general, then, to bring forth fresh, enthusiastic, original writing, the subject assigned must be interesting to the student; in order to call for his best, sincerest effort, it must be of certain dignity and integrity, must seem to him to have some reason for being; to provide for his acting in good faith — writing with care and expressing genuine feelings — it must be judged good or bad not according to some text-book standard, but as it stands or falls when put to the actual test. This is saying, in short, that the essay subject ought to be on something that is near the student's interests, that it ought to be attractively stated, addressed to a reasonably natural audience, and criticised by that audience, or from the point of view of that audience.

Joseph V. Denny thinks that the actual subject assigned for any particular task is not so important as the manner in which it is assigned, and the majority of people who have experimented will probably agree with him heartily.

The choice of topics for composition [he says] is not so important as the way in which they are stated and conditioned. If our object is to train the power of seeing and expressing relations, of grasping in imagination the meaning and total significance of a number of details, the statement of the topics should, if possible, suggest a typical situation in real life. And if we wish to enlist the personal interest of the writer in his work, the statement of the topics should suggest a personal relationship to the situation, on the part of the one who is to write. Moreover, it should suggest a particular reader or set of readers who are to be brought into vital relationship with the situation. Pupils require the definite statement of these things in the topics, in order to form the habit of forethought, or writing with a purpose, of choosing an advantageous point of attack. The composition topic that suggests a problem for solution calls into activity all the resources of the pupil. It compels the pupil to recognize the specific character of the situation. It invites him to forethought, requires him to select wisely and to grasp the situation, or a related set of circumstances, in imagination. It involves him as part of the situation, furnishes him with a point of view and a purpose, and reminds him of the hearer to whom he must direct his words.[1]

I should say, that to get the best results, the writer should bear more than a personal relationship to the situation, situation meaning, of course, the person written to, the occasion for the writing, and the point of view of the writer. It is not enough that he be involved as part of the situation; he ought to be master of it, creator of it, if possible. Only then is he sure of himself, independent and free, and only under these circumstances will he keep his audience first in mind and forget his teacher, or the class which he thinks will be likely to hear the essay read. It is the ideal relationship. When the student is the originator and owner of the situation, then it is his to deal with as he likes; it is his child, he naturally has the most tender and enduring interest in it. Responsibility and freedom at the same time seem to me to be necessary to all good writing, and both arise from the attitude of the writer toward the subject. If he is master of the situation, he has at once the responsibility and freedom of mastership; responsibility, involving earnest desire and intelligent activity toward the reaching of the end in view, and stimulative of originality, ingenuity and foresight; and freedom, involving perfect familiarity with the situation and perfect fearlessness and confidence in handling it.

[1] JOSEPH V. DENNY, Two Problems in Composition Teaching, in "Contributions to Rhetorical Theory" series, published by F. N. Scott, Ann Arbor, Mich.

There really seems to be no limit to the good that can be accomplished with a well-chosen audience and situation from the point of view of both the student and the teacher. For his part he loses no time, he goes to work quickly and intelligently, because he is at home as soon as he places the subject; the more at home he is, the more master of the situation, the more intelligently and quickly and interestedly he works, of course. The reason is not far to seek — he is doing the same things here that he is doing everywhere else in the world, talking with people to whom he would naturally talk, about things he constantly has occasion to talk of actually. Writing is placed where it is most intelligible to him, among the businesses of society. This is not a theoretical statement, that a good situation saves time. The students themselves testify that the task of writing is very considerably lessened for them, when they know why they are writing and for whom. Besides this, one can know certainly from observation that the difficulties are lessened for a great majority of them by a proper placing of the subject. When themes are given out to be written in class and there is a preliminary talk about the person to be addressed, they go to work quickly and in a business like way; those who sit staring at the paper are really few and far between, and generally of that class of students to whom exertion of any kind is always distasteful. The saving of time, however, is not the most important gain to the student; there is the saving of his *feelings*, the immense economy of that nervous energy that goes into the making up and worrying out of an uninteresting essay. Then, most important of all, there is the positive gain in mental strength that comes from the stimulating effect of congenial occupation.

From the point of view of the teacher, the proper conditioning of the essay subject is indeed a great boon. It sometimes accomplishes marvelous results in the student's writing, reaching faults that could not be reached by repeated criticism, and putting life and tone into the dreariest of perfunctory pages. This is also not a theoretical statement, although it rests on sound principles, but a statement of fact, as the writer could venture to assert from her own experience, even if testimony from other

people were lacking. Notice, for instance, how the two themes quoted below prove the statement in regard to the advantage of the situation from both points of view. The first was written by a student noticeably below the average in the class, the other by a student who was good in all her work, but of no particular ability in writing.

GOOD NATURE AND UNSELFISHNESS

"What was it you said about Jack?"

"I said he was altogether too good-natured. This is only one scrape out of a hundred he has plunged me into just by his everlasting good nature. Yesterday someone mentioned getting up a tennis club. Jack immediately acquiesced, and suggested that they meet at our house tomorrow afternoon.

"The courts are all laid out, you know, and it won't take Bess but a minute to make us some lemonade, *et cetera.*" He told me just half-past eleven this morning that the people were coming at three o'clock this afternoon, and "You know, Bess, they really must have some good things to eat."

"But," I said, "how can I prepare for them at this short notice?" "Oh, I'll just run over to the grocery and get the necessary things, and I'll squeeze the lemons and all those little things. It will only take us a minute to get ready for them."

"But where is Jack?"

"Oh, he has forgotten all about it, and has gone off on a horseback ride, leaving word with mother to tell Bess that if the people come before he gets back to give them the balls and rackets and tell them to start in playing. You see, if it hadn't been for Paul I should have been in an awful scrape. But he stepped in and worked like a Trojan. There he goes now with a pail of lime to re-mark the court. If it were not for Paul I don't know where our family reputation would be. But I do wish he would impose upon other people a little more and have some of the fun Jack gets out of life. I am sure Jack could spare a little.

"And yet isn't it queer that everyone likes Jack better than Paul?"

"I don't know. It seems to me that a good-natured person is invariably liked better than an unselfish person. Unselfishness becomes wearisome at times, but good nature can almost always be endured. If everyone had Jack's disposition it would be a happier world, but I don't believe we should accomplish as much."

The theme was thoroughly enjoyed by the class, who praised it for its spontaneity and naturalness and for the appropriateness of the situation to express just what the writer wanted to express, and criticised adversely nothing but the moralizing at the end. They thought that the fond, half-irritated, half-amused sister

would be very likely to talk in this way; they even considered the names Jack, Paul, and Bess admirably fitted to the characters described. The writer modestly refused to take any credit to herself, however, for good work, and insisted: "Why, it isn't well done—it's just *true*. That sort of thing has happened a hundred times in our family."

The other essay was on "The Value of a College Education," and when it was first given out for suggestions as to treatment a genuine audience and occasion was presented to one of the students. It seems that she had a boy cousin of some sixteen or seventeen years of age, who had taken it into his head that he did not want to go to college, although he was well prepared and nobody had ever thought for a moment of his not going—it had been taken as a matter of course. The girl was anxious on her own account to have him go on, but more anxious because a much-beloved uncle and aunt of hers (and of the boy's too) were shocked and grieved at this sudden determination, but quite helpless, for they had exhausted all their arguments and the lad was still unmoved. He didn't want to go to college, didn't care for study; the one thing he did care for was athletics. It occurred suddenly and forcibly to the rather mature and conscientious freshman when this subject was given out, that possibly she might influence him, being a college girl and representing in a way the college world which had never sent any direct or indirect appeal to him. It was a genuine need, then, to which her essay sought to respond; the need had existed before the essay was thought of. The class recognized the genuineness of the situation immediately and tried its best to help her. They decided without much difficulty that the boy must be approached through his athletic interests and that she must keep studies and college duties pretty carefully in the background. A number of definite suggestions were made, some of which were accepted as valuable and some rejected without question, because of objectionable features. She was asked to give some idea of the boy's character, and the class decided that it might be well to flatter him delicately, but that he was a reasonable and sensible boy on the whole, and could be talked to seriously. The letter shows how the various suggestions were incorporated.

DEAR EUGENE: In the last newspaper which I received from home, I find an account of the great Buffalo-Bradford football game. There is, I see, special mention made of the excellent work done by Eugene Parker, center. The account even goes so far as to say that the victory of the Buffalonians is due to *your* cool-headed, forcible playing. Let me second the praise with a vigorous Bravo! and extend my heartiest congratulations, Eugene, for the success you have met with in the field. I imagine the entire high school pays you the homage due a hero. Of course you like it, in spite of your modesty; you would not be human otherwise.

When do you propose winning laurels like these at college? Let me see, you graduate in June from the high school, don't you? In the fall you will enter—well, which college? Is to be Cornell, Harvard, or Yale that will claim you? Just let me turn fortune-teller a few moments; I am confident I can prophesy pretty near the truth regarding your immediate future.

In the first place, in June, you will pass without any difficulty the college entrance examinations, which your course has well prepared you to take. In September, you will appear on the campus of your chosen college, and find yourself among a lot of fellows, all about your age, and just as replete with virtues, and faults, and exuberence of spirits as yourself. It will not be long before you will make a few good friends and many acquaintances. Your classmates will look upon you as an equal at first; when they observe your prowess in athletics, they will look up to and admire you. They will point you out on the campus to their friends with some such remark as: "There's Parker. "1904" has reason to be proud of him. He's on the team that's going to do Pennsylvania soon." You will find "going into training" quite to your liking. But this is not the only side of college life that will attract you.

I foresee that, though you are not to be one of the "sharks," you will manage to keep abreast of the average man in your class. Why? Because that level-headedness and persistence which serves you so well in football complications is just what is going to stand by you in unraveling the problems of college "math." and science. You will find the satisfaction and glory of triumphing along these lines just as great, though it may not appear so to you now. As your course continues you will gradually realize that these more serious things are going to pave the way for your future career.

When Class Day finally comes, and you are bidding farewell to the "dear old 'varsity" and your friends, you will reflect something in this wise:

"It *was* worth while to come to college. I am glad I entered into athletics, but I am still more glad that I stuck by the work. There's my father over there—how proud he looks! Besides, I'm armed; let the world advance!" Some such sentiments as these you will feel, though you may not formulate them.

Success to you, Eugene; and mark my words.

The exact subject assigned in the first place, "The Value of

a College Education," has been lost sight of unconsciously, and quite rightly. It is a subject twisted out of shape to meet the demands of a real need, and such an exercise is a thousand times more valuable than the writing of a merely perfunctory essay on the subject as given out. It is genuine, even to the statement of the receiving of a marked newspaper describing the football game; and when, after hearing it through with interest, the class praised it enthusiastically for its absolute sincerity of tone, the time and attention given to it seemed to have been not ill spent, for the students certainly realized as they probably never had done before, how excellent a thing it is to be sincere in writing.

The letter was sent as had been planned, and the boy's only comment at first, according to the aunt, was a grumbling objection that he wasn't center rush at all, he was left guard. The aunt thought he seemed to be impressed, however (she had been sent a copy of the letter), and she followed up the advantage by giving a dinner to him and his athletic friends who *were* going to college. Toasts were made and there was much excited talk about the various colleges chosen by the boys and the standing of each in regard to athletics. Toward the end of June the aunt sent word that they were all delighted with Eugene at last. He didn't say much, but he was apparently making all preparations to go to college.

It is interesting to note from this piece of writing how far a carefully worked out situation goes toward the writing of the essay, how many questions it settles definitely; the starting point always, and the end to be reached, and having these, the path from one to the other is usually pretty clear. The student knew here that she must begin with the one thing the boy would listen to, and bring him gradually to the distasteful things, but she saw that it would not be wise to stop there, she must get him through the difficulties, hence she takes him on to the pleasant end, his graduation day. Disagreeable studies are not dwelt on long, but neither are they tucked out of sight ignominiously and dishonestly; they are brought out fairly and squarely and disposed of as a football hero would have them diposed of, promptly

and energetically. She appeals to his fighting instinct and to his pride: "math," a thing to be met and overcome on the field of battle, is much less terrifying and much more interesting than "math," a study. Unconscious of rhetorical precepts, she nevertheless could not be criticised for lack of unity or selection or proportion or sequence; and although not striving for effect in the slightest degree, she has been effective, for sincerity and earnestness are bound to give dignity and forcefulness to any piece of writing.

A theme of this kind is immensely encouraging to a teacher because of its suggestiveness. It suggests, in the first place, a simple and adequate plan for the criticism of student composition. Has or has not the essay succeeded in reaching the person to whom it is addressed, and if not, why? What ideas ought to be added, what cut out? Why this word and not another? From the largest problems of outlining and arranging material down to the minutest details of structure and diction this questioning may be reasonably applied, and without any fear that the student will object to its "fussiness," or accept it resignedly because the teacher "wants" the thing said thus or so. The criticism is thoroughly impersonal — it arises from the needs of a third person — is consequently outside of teacher and pupil alike. One is just as well fitted to judge as the other usually. Other things being equal, the best judgment comes in every case from the one who has the completest knowledge of the character and temperament of the audience. Again a theme such as that quoted above is immensely encouraging to a teacher, because it suggests endless possibilities for the calling forth of good expression at the first writing. Theoretically it would seem that almost anything might be accomplished in writing by a proper conditioning of the thing to be written about. One can conceive of planning deliberately to reach a certain fault or supply a certain lack in the writing of an individual or of a class — plan to correct, for example, the almost universal fault of inaccuracy in seeing and thinking and in the expression of what is seen and thought by suggesting to the students that they write out the perception for somebody who depends on their

description for a true idea of the object. As . . . . "a description of my house for Sue, who is coming to see me next week. It happens that I can't meet her, and it will be impossible for her to see the number on the houses as she gets into town after sundown, so she will have to pick it out from my description." This situation happens to be an experience so often met in real life, that the necessity of exercising care seems perfectly reasonable and natural, and the letter to Sue cannot fail to be far beyond the student's ordinary writing in clearness and accuracy. If these qualities, therefore, may be planned for and produced, if, in the same way, ease and forcefulness of expression may be contracted for, there would seem to be no reason why, by increasing the demands of his audience and occasion, a student might not be brought to express himself effectively and excellently, even on most difficult subjects.

This method of planning beforehand to bring about good results in student writing it may be interesting to know, is used by the Department of English in the Massachusetts Institute of Technology.[1]

> In this school the natural demand of the student on the English Department is that it teach him the art of expression in written language for use in his technical work. . . . . No essay made up of disconnected thoughts will serve him. In a system of philosophy there may be gaps between the stars, but there may not be one break in a system of water-works. . . . . At a technical school, where organization is essential, any confusion of thought has to be met with peculiar rigor. English composition, like other arts of expression, is more open to this confusion than is work in acquiring learning where the science or language offers itself to the student, problem by problem, word by word. To gather ideas is in some ways easier than to make them properly depart. A difficulty in selection meets the student when he first seriously tries to write, and it remains a difficulty to the end. In order to lessen this, it has been found most helpful to place emphasis on three things: the reader, the subject, and the point of view. The need of thorough drill in these is nothing new. The special idea gained from the institute in connection with them is that they are really preliminary to a drill in the other principles of composition, that by an understanding of them at the start, much which would otherwise continually harass the student in his study of unity, coherence, emphasis will be unconconsciously avoided.

[1] ROBERT G. VALENTINE, *Technology Review*, October 1899.

We are taking it for granted, of course, that the student "warms up" to the situation and audience and makes it a part of himself. This is the ideal state of affairs and not always, or perhaps one might more truthfully say, not often realized. It is probably unfortunately true that a large number of students in the class do not foster kindly the majority of situations made for them, or enter fully into the spirit of those they have made perfunctorily for themselves at the last moment. However, even a partial entering into the situation is better than no situation at all, and it is consoling to think, what is doubtless true, that the audience idea is one which gradually works its way through a class; that though it may be fully comprehended by only a few at first and perhaps objected to by some, it will inevitably impress its advantages upon the indifferent and unwilling, and bring them at last to write to an audience naturally and with pleasure. The teacher can do much to hasten the spread of the idea; he can always at the very least see to it that no audience assigned by him be so fatally unreasonable as to kill itself at the outset because there is no reason why it should live. A very ordinary imagination ought to save him from the mistake of dragging in an audience by the head and shoulders and expecting that the class will do anything else than accept it with silent disgust or open derision, and that the writing will be anything but forced and unnatural, on the one hand, or utterly insincere on the other. But if the teacher makes mistakes as he is bound to do (because no person's judgment is infallible) he can always read the signs of the times and decide at once that something is wrong with an audience that is received patiently but with unmistakable signs that the class is bored or indifferent, and he can avoid making that particular mistake again. He may not be able to turn aside then, although it would be worth his while to do so if at all possible, just for the sake of seeing the tide of pleasure and interest flow back into the faces before him. If one had the ingenuity, this would be the only way to assign an audience, mention one after another tentatively and never stop or be satisfied until the right look came into the faces of the class. The right look means unmistakably the right audience,

and that means inevitably that you will get the best and most enthusiastic efforts of the student.

But it is never safe to insist that the class as a whole write to any unchangeable audience, unless the instructor is aiming at some very definite result, and judges the accomplishment of this end so important, that rather than risk not gaining it, he will sacrifice the student's personal feelings. It stands to reason that the person actually written to and the particular occasion for writing must be supplied by each student for himself unless the audience given by the teacher be a real one, as in the case of exchanges between classes or schools or themes sent to an artist, from which the artist is to draw or paint the object. It can be seen of course that a situation definitely stated by the teacher must be a hypothetical situation to a student, and this seems unfortunate since it is undeniably true that a certain number of the audiences written to by the students are fictitious anyway. Two or three definite suggestions by the teacher as to the audience and occasion would be a good thing, I should say. From these the unimaginative could probably get ideas for situations of their own or make personal application of those suggested, and the imaginative could have all the joy and all the benefit that must come to them from making the unreal thing a reality. To provide for everyone's making a serious attempt at choosing the best possible situation, and for getting hold of a great deal of suggestive material, the plan of asking for a written statement of why and how and to whom each student is going to write is very valuable. I think I have never known two students in these statements to write to exactly the same audience or from exactly the same point of view. This is not saying that they all choose good and natural situations, for they choose very bad ones generally, especially at first; perhaps in a set of essays only one or two do noticeably well in this respect. The hopeful thing is that not the same students every time do the good work, by any means, and that a much larger number do good work at the end than did at the beginning.

After all is said and done, a good audience for a student's writing is an inspiration, a good subject for that matter, too, and

like all other inspirations it is rare and to be highly prized when it does come. Like inspirations again it is not to be found by diligent seeking, but is likely to come upon student or teacher most unexpectedly and unaccountably. But last and most important it comes most readily to open and impressionable minds, those that are quick to see resemblances and make comparisons and connections with outside interests, and it has this great advantage that one can often put himself into the right attitude of mind for its fitting reception and so possibly even induce it. A good imagination is necessary to this attitude, I should say, a proper sense of humor, a delicacy in interpreting the feelings of the students, a keenness in detecting the elements of which a class is made up and tact in avoiding its prejudices; possessions obviously, of a mind that can adapt itself readily to existing conditions, that can understand and appreciate the student's point of view on all occasions.

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HISTORY OF EDUCATION; WHAT IT STANDS FOR

ALL callings and professions must pass through similar experiences in transition from the early empirical stage to the scientific. Each must prove its claims to this advantage, and must establish its terminology by taking the words of common use and giving them the definite meaning necessary in scientific discussion and inquiry. Of all callings, doubtless that of education is beset with most difficulties of the kind noted, chiefly because more people are, in one way or another, related to it, and are educators in some sense as parents, as teachers, and as administrators of school affairs. Such terms as education, teaching, instruction, training, school-keeping, and school-teaching are used with such looseness that to the common mind they are practically synonymous. Those who represent education as a profession must patiently apply themselves to more careful definition, and to careful demonstration of the scientific basis of their profession. In this interest I shall undertake to indicate what seems to me to be the necessary characteristics of a history of education, and what it stands for in practical application.

If education is "teaching school" in the usual sense, then a history of education is a record of the various devices and methods used, and of subjects taught in the centuries past. It is as valuable, and no more so, as the study of the modes of warfare and arms used by Julius Caesar would be to the common soldier of our modern army, or as a history of the methods of building boats and navigating them a thousand years ago would be to the common sailor on one of our ocean steamships.

If, however, education is an integral element and agency in civilization, its history must be defined as one with the history of civilization itself.

Happily, it is not necessary to give a new definition of history. Since Hegel gave us his *Philosophy of History*, and Guizot his *History of Civilization*, and Stanley his *History of the Jewish Church*, and since all thought has consciously or unconsciously

adopted forms of evolution, no one thinks of history as a mere aggregation of noted events, striking because interesting, or as marking epochs of change in the destiny of nations. Briefly, history is a record of the progress of the races in civilization,—progress in improving social conditions and in utilizing the materials of nature for the betterment of human conditions. It assumes that races have life tending toward maturity and fruitage as naturally as the seed toward the plant, and as the child toward manhood.

The rise and decline of peoples, their conflicts and their contributions to the new life which they inherit, and which in its turn disappears in all except the imperishable elements of law, order, and truth which it leaves to its successors—all this is the business of the historian to trace and to record.

What then is education that there can be a history of it? For our present purpose we define it as the method by which peoples in the several stages of their development have prepared the coming generation for the life of the period in which they are to do their part. The civilization of a given period is embodied in the institutions which in general are the state, the church, and the family. These institutions are also the instruments of civilization, and therefore assume forms demanded by the unquenchable spirit within, or else dissolve to give place to new forms.

It is then the institution, one or more, and together or separate that educates, that makes the youth a man of the period by making him one with itself as well as for itself.

The institution, besides being the embodiment of the spirit of civilization in one form and degree or another, includes that which is limited to itself by reason of its temporal relations. Besides the permanent and universal, of which it is the depository of the past, it has its institutional characteristics of language, customs, habits, sentiments, and opinions. Its education consists in its processes of fixing in the minds of its children the ideals it represents by instructing them in the knowledge it possesses, by training them to its habits, customs and tastes, and by giving them the intellectual power necessary to meet the demands of

the future. Its negative influence in education is quite as potent in what it excludes, by depreciating and forbidding, as by what it exalts and honors.

Again, every people naturally passes through its stages or epochs of development from childhood, in which its institutions are paternal, to the democratic and reflective when the individual inquires, considers and decides for himself. In each of these, the system of education corresponds to the condition of the institution.

Another characteristic to be observed is that the school and the school system is both a product and instrument of the institution, differentiated in the more advanced stages of its development. The savage tribes educate their children as truly, and after the same method, as the father of the family educates his sons, by associating them with him in his occupation, by relating to them his experiences and the traditions of his family, and by training them to the customs, language, and ideas of the family.

As civilization advances acquisitions increase, relations grow more complex, minds pass from the imitative stage to the rational and introspective. These larger duties must now be assumed by the school which must select the materials of learning and provide skillful methods by which to advance its youth in the same number of years to the higher plane of understanding and responsible action.

As there is an ebb and flow in the tide of human history, —instances of arrested development in the life of peoples, — it is for the history of education to note this, to follow the current of advance, and to observe the contributions of permanent value that are gathered from age to age.

Preparatory to the study of the history of education, it is required that one be a student of history in its broadest meaning. He must not only have acquired facts of history, but still more, he must have understanding of the progress of civilization, and the habit of interpreting events in their relation to such progress.

Then, in the study of history of education he is ready to consider its problems, of which the following are important: In

what stage of their educating processes are a people found? Has their civilization differentiated the school as an institution? What is its influence? What phase of life in ideal and in activity of mind and body does it intensify? Is the system of education the product of the unconscious development of society wholly, or has society reflectively and rationally adopted methods that conform to their ideal?

Then in the estimate to be placed upon the historical contributions of a people, he will inquire what elements have been incorporated as material factors in the education of subsequent history; and what general law of education has been discovered, and incorporated in use, that is accepted as a permanent contribution to the experience of the race.

Referring to historical examples, the study of the history of Chinese education must note wherein the system serves the end for which it is organized and is, so far, good. It will also note wherein the system that serves the institution defeats the ends of civilization, and causes an arrested development, and therefore offers nothing of value to the world at large. On the other hand, the history of Greek education discovers the principles and the methods of a specialized system in complete harmony with a developing life, that extended through a greater range of culture than any other nation in the world's history, and has consequently contributed materials in theory and in principles of education that have become as much a part of modern culture as her philosophy.

The practical value of a rational study of the history of education prepares us to study the historical rank of modern systems. We may answer in general, why and in what sense a given system is good; what interest or view of life it represents and supports; whether it is broadly civilizing or narrowly institutional; whether it is developing under conscious rational guidance, or is only unconsciously instructive.

But coming directly home to our own American system, it is only after a broad survey of the whole field of history and its educating forces that we can with any confidence pass safe judgment upon our own education. Of the unsolved problems that

are pressing upon us we have yet to give final answer to such as these: In what interest is our system organized? Is it for the industries, for citizenship, or for the highest ideal of a Christian civilization, which serves all others, in that it comprehends them? What ideal of life does it foster? What duties and responsibilities does it inculcate? To what degree is our system of education rationally adapted to its purpose, or on the contrary, how far are we following traditional methods handed down, or following the latest voices that offer change from what is old?

If the state and church are two separate and distinct institutions, and the state assumes the responsibility of educating its youth, where is the place for the inculcation of morality, and what are the evidences that moral character can be established without the aid of that ideal of life which Christianity has given to the world?

The serious problems of our education are not those of mere detail and temporary device; not whether this should be taught, or that left out; but those which indicate the trend of our development. In our schools, higher and lower, is a low form of commercialism taking possession of our schools, and crowding out or dissipating that pure spirit of culture that marked the older institutions of our country? Is the spirit of trade making shopkeepers of our youth instead of men and women for homes and patriotic citizenship? These questions cannot be answered by the sentiment nor by the appearances of today. It is only by taking a broad sweep in historical vision of the present as the fruitage of the past that we can judge correctly, or wisely direct the development of our system of education. Who, then, should be students of the history of education? One may be a great teacher, with no knowledge of the history of education, as one may be a loyal and industrious citizen without a knowledge of his country's history. He may be an expert politician without it, but he cannot be a statesman. He may be a teacher, doing well his appointed work under supervision, or as one of a system, but he cannot be an educator. No measure of teaching ability can make one an educator. Men who have attained renown as teaching specialists have depreciated the history of education.

As well might the miner who has dug deeper than any other, and brought to the surface new and precious things, decry the study of geography or astronomy.

It seems evident then that whoever will become an intelligent educator, able to estimate the place and worth of his own teaching, and give wise direction to his own energies, or wisely direct the energies of others, must be a careful student of the history of education. For this reason, too, the history of education should take high rank in our university curricula. It should be made serviceable in establishing the high ideals of manhood, and should counteract the diverting influences of specializations that often lose sight of the great end of living while perfecting the means of it.

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WORKING CONDITIONS IN THE HIGH SCHOOL WITH REGARD TO COLLEGE REQUIREMENTS IN ENGLISH

THE study of English in the secondary school is, in a sense, a new departure. The time is not far behind us when reading, spelling, and grammar included all that was attempted in this line. And while little was gained that could broaden the pupil's mind or develop his capabilities, it cannot be denied that a greater efficiency was secured in other respects. The average pupil was a better reader, a better speller, and was possessed of a better knowledge of technical grammar than is the average pupil of today. In a word, there was a real foundation upon which to build, though a narrow one.

The lamentable condition of the English work in the secondary school today has occasioned widespread comment in no wise complimentary to school or teacher. And now in the interests of higher education, as a matter of self-defense, the university and the college are demanding that the secondary school shall come up to higher ground. Nor is this demand alone to the interest of the university and the college. It is even more to the interest of the secondary school and of the world at large that from the portals of the one into the stirring life of the other shall issue men and women better fitted, morally and intellectually, to take up the practical affairs of life.

The demand of the higher schools looks to a steady advance, along scientific lines, of all secondary work. And all secondary work is rounding out in response to this pressure from above. English, however, seems to respond more slowly than other subjects, and the purpose of this article is to discuss briefly some of the conditions that are responsible for its tardy advance in the high school.

The question is of interest to others than schoolmen. The ability to use clear, concise language, to clothe a thought in appropriate dress, to add whatever of adornment occasion

may require, to hurl an invective even with proper force when need arises, works literally for *righteousness*. Never to such a one comes the vexation of spirit that ruffles the whole inner being of the man who *would* speak, but *cannot*—who can in no way, even to himself, voice that which he feels. Such a limitation of speech is a bond stronger than iron to hold a man from coming into close touch with his fellow-men. It not only bars him from the world of letters, it makes him an alien in his own country.

Before entering upon a discussion of the conditions that retard the progress of the English work in the high school, it may be well to glance at the requirements which the university and the college are urging. In doing this I confine myself to the requirements as outlined in a pamphlet based upon the report of the Committee of Ten to the National Council of Education, and issued by a representative university as a suggestion to the teachers of English in the secondary school.

A knowledge of *grammar* that will be to the pupil a means of interpretation in his study of literature, and will enable him to criticise and correct his own composition; the treatment of the subject to be moreover "scientific, historical, comparative."

Those points of *Rhetoric* which will furnish him with apparatus for investigation and criticism in his high-school work.

A *Word-Study* that will lead him to recognize the kinship of related words. A training that will enable him to gather all information concerning words that the dictionaries at hand may afford him, and a further training that will enable him to apply this information to a word in any given context "with a view to determine its precise value and force in that context."

Two *Shakesperian Dramas*—to be considered from the "historical, the technical, and the literary point of view."

About thirty poems—Lyric, Narrative, Descriptive, Reflective—"approached not only from the imaginative but from the historical side." "To be so studied as to develop the great facts of chronological sequence and relationship in English literature, the distinct types and schools of poetry, and the characteristics of the great epochs and groups."

Addison's *Essays* and Macaulay's *Warren Hastings*. The work in the first to be centered upon "the striking aspects of character and society" as there presented. The second to be made valuable "as an introduction to the modern style of direct and emphatic narration and description, and as a

stimulus to the study of character, morals, political problems, and history."

A study of *Classic Myths* necessitating about sixty lessons.

Three Orations—to be studied first, along the line of "their treatment of great and far-reaching questions in the light of universal principles," and second, in their masterly handling of argument.

Two *Novels*—Tom Brown; the Newcomes, or Silas Marner and Vicar of Wakefield, or Henry Esmond—which must be known thoroughly and studied as works of art.

A training in *Composition* with the threefold object of securing good mechanical form, free expression of thought, vivid action of mental powers.

These are the requirements of the University of California, which I have cited because of my sincere respect for this institution, and because its requirements represent fairly the requirements of other schools of like standing.

According to these requirements, "The aim of secondary instruction in English is to enable the pupil to write and speak with clearness, vigor, and grace; to acquaint him, at first hand, with a few of the best literary products of English and American thought; to cultivate a sense of literary style, and to inculcate a love for the best literature." Now when we consider that the course in the high school is at best but four years, and consider also the age of the pupil who is supposed to accomplish all these requirements, and that his working time must be apportioned among various studies, it appears at first glance that too much is demanded.

But let us turn our attention to the other side and determine what it is that causes the English work in the high school to lag behind what these requirements demand. In the first place, the average pupil in entering upon the high school work, is not prepared for the work which he has to do. The university which I have quoted above states: "The most common form of deficiency among students who apply to enter a university—and not a few of these actually get in—is that they can neither read nor write." If this is true of the pupil who has left the high school, how much more serious must be the deficiency at the period when he applies for admission to that school. It is difficult to determine where to place the blame. But wherever the fault lies, whether in the method of teaching, or in the system that gives to the child during

the first eight years of his school life eight or more different teachers with varying capabilities and predilections, or in multiplying the subjects *touched upon* in his grade work and so scattering his energies that nothing is thoroughly accomplished, the fact remains the same. The average pupil entering the high school is far from being a good reader, can spell but fairly, and has so meager a knowledge of the simplest grammatical constructions that the teacher of higher English has little upon which to build. The tendency of grade work seems to be away from the idea that "thorough knowledge is the backbone of culture."

The value of the old-time drill ought not to be underestimated. May not a radical defect in our English work today be due to the fact that we have discarded the old method entirely to make way for the new? We have dug up the old, root and branch, instead of grafting the new bud of culture upon the thrifty stock of well-grounded fundamentals. The spirit of the old schoolmaster might justly retort upon the narrowness of our methods and smile in derision at the weak foundations upon which we are rearing our structures.

Another condition that enters at the kindergarten with the child and is allowed to accompany him through the grades and into the high school is the habit of incorrect speech, the result of association. It is a habit that the child has contracted during the most impressionable period of his life. It is so strong a habit by the time he has reached the high school that he is often unable to command his tongue to the proper expression even when he is cognizant of it. This, to be sure, is a condition which the grade teacher also must meet. But it is first met at an age when the child's forms of expression may be molded with comparative ease. And I am convinced that if unity of purpose throughout grade work made language, as it ought to be, the basis of all other work, the child would emerge from his eight or nine years in the grades with the ability at least to express himself in comparatively correct form in spite of all outside association.

Another condition that blocks the progress of the work is

that when the pupil enters the high school he is at an age when his faculty of appreciation is almost wholly undeveloped. It is the dawn of manhood and womanhood, and the unconscious effort of the child to emerge from this chrysalis state produces a restlessness that needs not restraint, but direction; an enthusiasm that needs not curbing, but a proper object upon which to expend itself. The pupil is at that stage of development when if the beauty, or the glory, or the majesty of nature impress him with a deeper sense of feeling than ordinary and stir in him an uneasy longing to voice that feeling, he does not understand. His vigorous young life becomes impatient, nor is it quite at ease again until he has shaken off the uncanny feeling and has settled back into the well-known state. If he reads at all, it is the thrilling tale to which he turns. The actions of men, not their thoughts and feelings, interest him. He delights in exaggerations, in the unreal. Broad humor attracts him, but the rare touch of Addison or Thackeray is too delicate for his grasp. Pathos is bathos. I have seen a boy in his senior year wipe mock tears from his eyes, with wretched grimaces to waken a laugh on the part of the class, during the reading of the chapter that records the death of Colonel Newcome. And the pathetic *adsum* was to him only another point for ridicule. He was incredulous when he read that Thackeray himself felt so keenly the reality of his own creation that he burst into tears as he said to Lowell: "I have killed he colonel." Delineation of character or description of scenery, no matter how finely drawn nor in what glowing colors of truth and reality, he skips as tiresome. His eye has not seen. His ear has not heard. He cannot appropriate that which is wholly foreign to his interest.

Few have at this period seen life with so clear a vision that they are quick to detect the finer moralities. The decalogue they know by letter. They are not yet awakened to the spirit. Nor has the previous training of either home or church always impressed the later law of love.

I once heard a parent impute the fault to the teachers of her children that the children had never heard the name Beelzebub.

It did not satisfy her when she was good-naturedly told that the effort is to keep Beelzebub out of the schoolroom. But it was a bit of wicked satisfaction to one teacher, at least, when sometime afterwards these lines occurred in the day's lesson:

> He preached to all men everywhere
> The Gospel of the Golden Rule,
> The New Commandment, given to men,

and the son of this parent did not know what was meant by the golden rule and had never heard of a new commandment. But, in justice to this young man, I should add that out of a class of nearly seventy pupils, although with the exception of a bare half dozen all attended Sunday school, but one knew anything of a new commandment, and the greater part of them knew nothing of the golden rule under that appellation. Where should the stricture lie?

Not only is the pupil entering the high school unable to appreciate the spirit of the literature that makes up so large a part of his English work there, but in many cases he is unable to grasp readily the thought of an ordinary sentence. To understand the barest statement of a fact is the limit of his ability. Let me cite an instance. The line, "Below the good how far, but far above the great," was dictated to a boy for the purpose of scanning. It was read to him twice, slowly and distinctly. He began, "Below the good *hell fire*," and there his line halted. Corrected, he proceeded to finish — "but far above the *grate*." Evidently there had been something in his religious training that had made an impression. This is perhaps an extreme case, but its indications are not to be mistaken. There is often little connection in the mind of the child between the words and the thought they express. He does not of himself command his mind to an understanding of that which is in itself too simple to need explanation.

Still another condition is the outside cry that the work is not practical. The successful business man who has won his way, not because of his lack of education, but in spite of it, and who sees life only in the sale of a bill of hardware or in the weighing out of domestic necessities, argues: "I have succeeded without

an education, and my child can." He has, on the surface, enough of reason to appeal to the child and to prejudice him beforehand against the work. "An education which shall keep a good coat on my son's back" is as much the popular cry in America today as it was in England when Ruskin penned the expression.

The newspaper at times asserts its influence and creates a public sentiment that frequently reacts upon the school management to restrict the English work and to hold in bonds the English teacher. A San Francisco paper some time ago, in commenting upon an examination that had been given by a professor of the State University to various high-school classes, which examination consisted of an extract from *Snow-Bound*, with questions as to meaning, imagery, and word defining, stated in effect that a child's well-being does not depend upon his knowledge of *Snow-Bound*. The average pupil nor his parent would be quick to recognize this statement as the first link in a chain which followed to its conclusion would, "by the rule that made the horsetail bare," eliminate *all* literature from the high-school course. This is one of the mildest of newspaper strictures, but even its effect was widespread and of such a nature that, under existing circumstances, the most vigorous school management, in full sympathy with the progress of the English work, would not be able to fully counteract it. The truth is that we are today in the midst of change that has been brought about by the requirements of the higher schools. It is in a measure a *forced* change, and there results, as always, a resistance to pressure.

To sum up, there is the previous preparation that has not prepared. The pupil is at that stage of development when he is attracted only by "lampblack and lightning," and has litle sense for the finer vibrations of life. Home training and public sentiment are not always on the side of higher education.

The immediate remedy for these conditions is not in the hands of the high-school teacher. It is not a case where the axe may be laid to the root of the tree. But the existence of these conditions will, in large measure, account for the failure of English to keep the pace set by the university and college.

To leave the discussion at this point would be to imply that there are no conditions *within* the high school that may also be held responsible. This would be far from the truth. But such conditions are, for the most part, imposed by the inability of the teacher of English to handle the subject with the firm grasp of accurate and broad knowledge, and with the tact and judgment that will turn to use even the most adverse conditions, though too frequently the economy of the schoolroom itself presents other difficulties. It is true that no other school work brings such frequent discouragement or entails so much of drudgery upon the teacher. But if to him the situation is discouraging, what must it be to the pupil who is literally befogged?

The difficulty seems insurmountable when considered in the light of the demand that is being urged by the university and the college. But in no iota should this demand be lessened. Its pressure is exerted in every direction. Not only must the secondary school obey the mandate and advance to higher ground, but by transmitting the pressure it will compel a corresponding movement on the part of the grades. Not only must the teacher of English, who is bearing the heat and burden of the day, be better versed in all that pertains to his work, but the school management will be compelled to accord to English a consideration it has never before received. And then — who knows? — after many days the *home* may respond in such full measure that the use of pure English in speaking and writing will be the rule, not the exception.

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SHOULD THE ILIAD BE RETAINED IN THE SCHOOLS?

AFTER a careful perusal of the article with the above title in the January number of the SCHOOL REVIEW, I cannot forbear to say a few words in reply. In so doing, I shall confine myself strictly to a consideration of the objections raised.

First, the dialect. To a school board unacquainted with Homer, or to a school official who has not read the *Iliad*, the array of evidence would at least seem startling, if not sufficient to keep this noble classic out of the public schools. But over against this we place the indisputable fact that pupils master the dialect in a short time, that peculiarities of reflection soon become familiar, and that after a few weeks —three or four at the most—little or no difficulty is experienced. But during this time fully as rapid progress is made as in reading any other author. If thirty-nine pages of finely-printed introductory matter are to be learned before any of the text is translated, then the objection would be valid; but no teacher would pursue such a method. If the pupil is to master every form, compare all differences of dialects, and use Homer only for purposes of syntax, etymology and philology, then I admit that the *Iliad* should go. But I maintain that such use would be an act of vadalism, a desecration of a noble work of art. As a witty Frenchman has well said, the man that would use Homer as a text book for parsing, "would botanize on his mother's grave."

There are always difficulties in approaching a new author. Every writer has his own vocabulary, construction, thought-forms, and environment. With these the pupil must become familiar before rapid progress is possible. Now the practical question is, whether the pupil finds greater difficulty passing from Xenophon to Homer, than from Caesar to Cicero, or from Cicero to Virgil. Caesar and Cicero differ widely in subject-matter, style, construction, and environment. The one is a continuous narrative of wars and rumors of war; the other is argumentative, impassioned. Cicero is more difficult in etymology, syntax, interpretation, and environment. Applying these tests to the transition from Xenophon to Homer, we find that in dialect only does the *Iliad* present greater difficulties: for the style is simpler, the syntax less complex, the interpretation easier, and the environment fascinating.

But what of the content? If the book, after all, is unfit for boys and girls to read, we need not concern ourselves about the dialect. Mr. Matthews is not the pioneer in this field; for, after reading the able criticism on the contents of the *Iliad*, I at once took down my Plato, which gives us, from the view-point of the Greek purist, the only valid objection to the *Iliad*. The third book of the *Republic* contains, however, a much fuller criticism. Plato's purpose is to remove from all literature everything that is suggestive of evil, impiety, or wrong-doing in any form. From the days of the Old Academy this same question has appeared in many forms.

We grant that there are a few indelicate situations; every reader of the *Iliad* knows that. But are these numerous enough to mar the poem and render it unwholesome for pupils to read? God forbid that I should be a "corrupter of the youth!"

Yet with all modesty and self-respect, yes, with some degree of self-commendation, I have taught this poem to pure-minded boys and girls without bringing a blush to the cheek of the most modest. Moreover, we must not lightly impute to the noble-minded men and women of the past and present a disregard for the moral welfare of the rising generation.

By the time the *Anabasis* is completed, the pupil certainly cannot be corrupted by any such transparent trick as that which Zeus (not Jupiter) played upon Agamemnon. A year's acquaintance with Clearchus, that prince of Spartan deception, with the still craftier Tissaphernes, "that most faithless and godless of men," with Xenophon, the master of sophistry, is, I affirm, an ample propædeutic to anything that Homer sings about. Looked at in one way, the *Anabasis* abounds in bribery, fratricide, lying, deception, adultery, treachery, and murder. Taken all in all, a much worse case can be made out against Xenophon than has been brought against Homer. And yet no one raises an objection to reading the *Anabasis*, no one need object.

If Homer must go, he certainly will have noble company. Xenophon doubtless will attend him; Shakespeare, too, must go, for he pictures some indelicate situations, uses some exceedingly naughty words, and portrays some ugly characters. What shall we say of Spenser, Dante, Virgil, the *Niebelungen Lied?* We must teach nothing of that book which tells of Joseph and of David. The subject of classical mythology must be dropped; ancient history must be rewritten; all our text-books in history and literature must be revised.

For my part, I believe that Mr. Matthews' fears are groundless, and that his argument, when carried to its logical conclusion, proves entirely too much.

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EDITORIAL NOTES

GEORGE HERBERT LOCKE

IN the Charlottenberg Oberrealschule, one of the educational show places of Germany and perhaps the best of the new modern schools, each of the last six divisions of the school contains fifty-six boys and each of the first ten divisions works in school with a master thirty-five hours a week. In English secondary schools the proportion of boys to a master is about twenty to one and the average number of hours in school is fifteen.

Judged by the number of pupils per thousand inhabitants receiving secondary instruction the United States stands first with 8.6 per thousand, Wales next with 5.3, then Prussia with 4.9, and France with 4.7.

ON August 1, 1896 a fourth year was added to the course of study in the high schools of New York state. Statistics for the year ending June 30, 1900 show that about 26 per cent. of all the students attending these schools now complete four-year courses of study. When the standard allowance from the actuaries' tables for loss by death and from available statistics for loss through failure of promotion from illness and other causes is made it is found that in 1900, 133,367 children could have been enrolled in the secondary schools while 79,365 or 59.5 per cent. were so enrolled. The corresponding percentage for the elementary schools was 79.5. These are interesting figures and may help to lay the ghost of "only 4 per cent. of our pupils in secondary schools."

MR. L. D. HARVEY'S biennial report on education in the State of Wisconsin is a valuable contribution to educational literature. Mr. Harvey is a man of many interests under the great general title of education and his account of what is being done in his state is very interesting and suggestive. As the interest of our readers is primarily in secondary education we notice that there are 219 free high schools in Wisconsin of which 163 have courses extending over four years and 56 over three years. The state grant for aiding high schools has been doubled and this material aid has been wisely distributed among the weaker schools. Very much is written in regard to the many changes that take place in the teaching staff of our high schools and an examination was made in this state to determine the changes in the high-school teaching force occurring during the period from 1896 to 1900. Of the principals who were employed in 1896, 81 per cent. were employed in 1897, 71 per cent. in 1898, 51 per cent. in 1899, and 38 per cent. in 1900. Of the assistants who were employed in 1896, 68 per cent. remained in 1897, 50 per cent. in 1898, 37 per cent. in 1899, and 24 per cent. in 1900. This does not

mean in the same school but in all the high schools of the state. Mr. Harvey gives the following advice to school boards: "no person should be allowed to teach in a high school who has not had professional training, or in lieu thereof, such successful experience as has developed professional skill." The last clause in this sentence is worth noting. We are so accustomed to the bald term "experience" that it is noteworthy when we have a sound definition of what *kind* of experience is desired. Mr. Harvey goes on to say that "the teacher whether in high school or elsewhere who combines professional skill in teaching with knowledge of the subjects and true nobility of character is the one who should be sought whatever salary may be necessary to secure him. The training of men and women is too important a matter to be entrusted to those who have thought only of a mastery of the subjects found in the curriculum." The office of inspector of high schools has been found of great value to the schools of the state.

ILLINOIS is fortunate in the reëlection of Mr. Alfred Bayliss as Superintendent of Public Instruction. His energy has been remarkable and, best of all, it has been wisely directed. A very good illustration of this is found in an interesting little pamphlet just issued entitled "Facts and Figures Relating to Common Schools in the State of Illinois, 1901." In this he has condensed the valuable portions of a large report, but instead of dry statistics and rows of figures he has clothed these with the form of a personal talk to those who are supposed to be interested in the progress of education in the state. The results of his investigation into the workings of the consolidation plan in Ohio for rural schools occupies a chapter and he tells us that legislation is now being asked for in this state. The chapter on High Schools is especially interesting to readers of this journal because of the investigation made last year by Mr. H. R. Corbett into the provision for rural pupils. We reproduce it here:

> There are but 321 high schools in Illinois. Ten counties have none. Less than 40,000 of the 958,422 children enrolled were in the high schools last year. I shall not stop to discuss the value of the high school. The high school comes with the great economical revolution in the midst of which we live. It is the product of no man's theories. The conditions of modern life are such that no system of common schools can be "thorough and efficient" without it. *It has come to stay.* It is as necessary as its influence is benign.
>
> Why, then, should the opportunities it affords be provided free for one half the children and denied to the other half? What has the farmer's child done that he should not be equally favored by the schools? To ask these questions is to suggest the only answer. "Those who live in the fields are as deserving of the best there is in education as those who dwell beside the asphalt." The country youth is entitled not only to as good a school, but to as *much* school as his city neighbor. How can it be equitably provided? The township high-school law, passed twenty-one years ago, even as amended, cannot be pronounced a success — without reservation. About twenty excellent schools are organized under it, but they are nearly all located in centers of population — cities of considerable size where the people have noted its

advantages. The communities for whose benefit it would appear on its face to have been made do not, perhaps could not economically, use it. Evidently some other way must be provided for him, or the country boy must continue to halt at or near the eighth grade, or find his own way to pay for his tuition through the high school. This is the law. But it is not equity, any more than it is consistent with the idea of a free state university.

I suggest and recommend legislation providing essentially as follows: Whenever a pupil has completed the course of study through the eighth grade, and has received the county superintendent's certificate to that effect, and when there is no high school in the district in which he resides, he shall be entitled to attend the nearest accredited high school free of all charge or tuition. The board of education having control of the high school thus attended to be authorized to collect, and the proper township treasurer to pay the tuition, charging the same to the district in which said non-resident pupil lives, if in the same township, or to the township fund, if he lives in another township. Or, and better, an appropriation might be made available, from which such non-resident tuition in high schools should be paid by the state at large. The essential thing contained in this recommendation is to open a door of a high school *somewhere* to every boy or girl who aspires to enter it, throughout the length and breadth of the State of Illinois. The high schools thus authorized to receive non-resident pupils should, of course, be inspected and approved by competent authority. A moderate use of state aid might well be made a means of bringing the high schools of smaller communities up to a recognized standard.

A bill to this effect has been introduced. It is House Bill No. 9, and Senate Bill No. 88. I hope you are for it, at least as a temporary expedient, pending the time when we shall have high schools in the country quite as generally as in town. For the thing to be desired is a high school within reach of every farmer's boy and girl, giving them just as high quality of instruction in mathematics, science, language and literature as the city high school gives, but so carried on as to lead them to see that mind is the dominant factor in successful agriculture quite as much as in any other vocation. It has been demonstrated at least once in Illinois, that the right kind of a high school in a progressive farming community can be so conducted as not only to pay for itself, but to so affect the farming that the increased income from a single farm product would *pay all the other taxes of the township.*

BOOK REVIEWS

Principles of Religious Education. A Course of Lectures Delivered under the Auspices of the Sunday-School Commission of the Diocese of New York. With an Introduction by the RIGHT REV. HENRY C. POTTER, D.D., LL.D., Bishop of New York. New York: Longmans, Green & Co., 1900. Pp. xx + 292.

AS ITS title states, this volume is composed of lectures. As these were given by a number of men it loses in unity of treatment what it gains in variety of point of view. The value of its contributions to its subject is also variable. On the one hand there is the opinion of those who favor using the material traditionally used by the Episcopalian church in the training of its children; and, on the other, there is the thoroughgoing reform proposed by professional teachers. None the less these lecturers are united on one point: Sunday-school instruction is inferior and should be made the equal of instruction given in the day schools.

The frank recognition of an almost total lack in the Sunday-school of anything like regard for pedagogical principles is most encouraging. Professor De Garmo's lecture upon "Religious Instruction in England, France, Germany, and the United States" could hardly be improved, not only for its admirable survey of the entire matter, but for its discriminating analysis of the mistakes of the average Sunday-school in its dealing with the period of adolescence. In a somewhat more constructive way Professor Hervey gives the elements of a pedagogy for Sunday-school teachers, and President G. Stanley Hall in a characteristic fashion discusses the "Religious Content of the Child-Mind." Professors F. M. McMurry and Kent discuss respectively the use of biography and geography in religious instruction. Both lectures are interesting.

What must be considered, however, the most important matter considered, "The Content of Religious Instruction" and "The Sunday-school and its Course of Study," is considered by Dean Hodges and Rev. Pascal Harrower, as it stands related to the Episcopalian church and its church school. Such treatment is of course entirely legitimate in diocesan lectures, and the two lectures are helpful for any Sunday-school worker, but we cannot help regretting that the fundamental subject of a curriculum had not been given a more general treatment. Important as the prayer book and catechism elements are for the Episcopal church, Sunday-schools of other denominations are hardly yet ready to adopt them. Professor Butler, it is true, considers the general principles of both curriculum and organization, while President Hall makes the sweeping statement that the order of the books of the Bible is in "the main pedagogic"—a statement that will hardly bear any severe examination without a generous use of the modifying expression. Yet even after all these excellencies are recognized, the lectures lack a careful treatment of the application of a graded curriculum to the Sunday school.

But this criticism is the only serious one to be passed upon the volume. Coming as it does almost as a pioneer in its department, it is most welcome and uncommonly

stimulating. We sincerely hope that it is but a forerunner of many others to be published under the same auspices. If this should be the case, we venture to express the further hope that in other courses each lecturer be allowed at least two lectures, or, indeed, better that some professor of pedagogy who is also a teacher in Sunday-school be asked to give an entire course upon some vital phase of Sunday-school teaching.

SHAILER MATHEWS

THE UNIVERSITY OF CHICAGO

English Literature. By STOPFORD A. BROOKE, M.A. With Chapters on English Literature (1832–1892) and on American Literature, by GEORGE R. CARPENTER. New York: Macmillan, 1900. Sm. 8vo. Pp. viii + (2) + 358. Price, $1.

THIS is, we believe, a fourth edition of a book first published in 1876, which is now universally conceded to be in the front rank of concise manuals of English literature. The third edition, carefully revised, appeared in 1896 and was favorably received by the reviewers.[1] Like its predecessor, however, it brought the story of English literature down only to 1832, although the last paragraphs were somewhat amplified. With Mr. Brooke's consent Professor George R. Carpentcr has now added a chapter of thirty-one pages on "Prose Literature from the Death of Scott to the Death of George Eliot, 1832–1881" and three chapters, aggregating forty-two pages, on American literature, thus increasing the size of the book by about one third. Mr. Carpenter has been eminently successful in catching the spirit of Mr. Brooke's sane and catholic criticism and in carrying it into the field of recent English and American iterature. The most cursory comparison of these chapters with the work of others covering a similar field, for example, Mr. Patton's chapter, now curiously antiquated, in the Appleton reprint of Brooke's "Primer" (1882), suffices to reveal their superiority. With such narrow limitations one cannot hope to do much with the criticism of individual authors; wisely, then, Mr. Carpenter has chosen to call attention to conditions and tendencies affecting the general course of our literature than to present what might be but a meaningless of writers. The chronological table, though somewhat meager for the nineteenth century, coming down to 1882, and the indexes add greatly to the value of the book — the most useful survey of the entire field of English and American literature that we know of.

CLARK SUTHERLAND NORTHUP

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[1] See, for example, *Academy* LI, 277; *Nation* LXIV, 106; *Dial*, XXII, 257; *Literary World* XXVIII, 87; *Athenæum* 1897, II, 161, a searching criticism.

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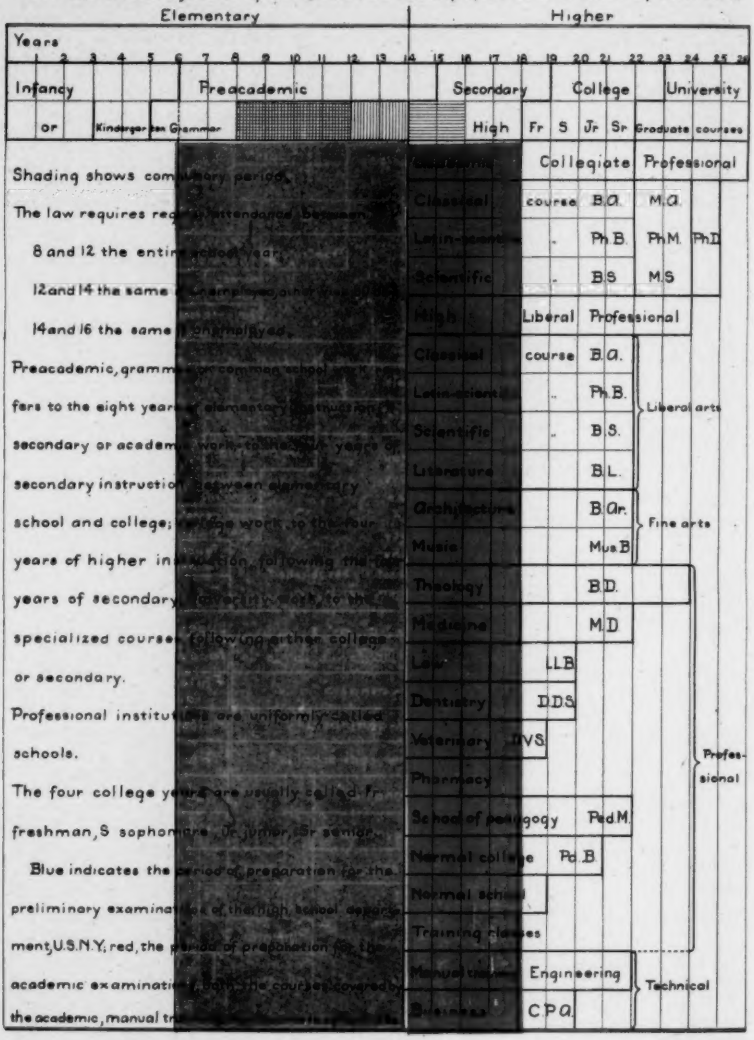
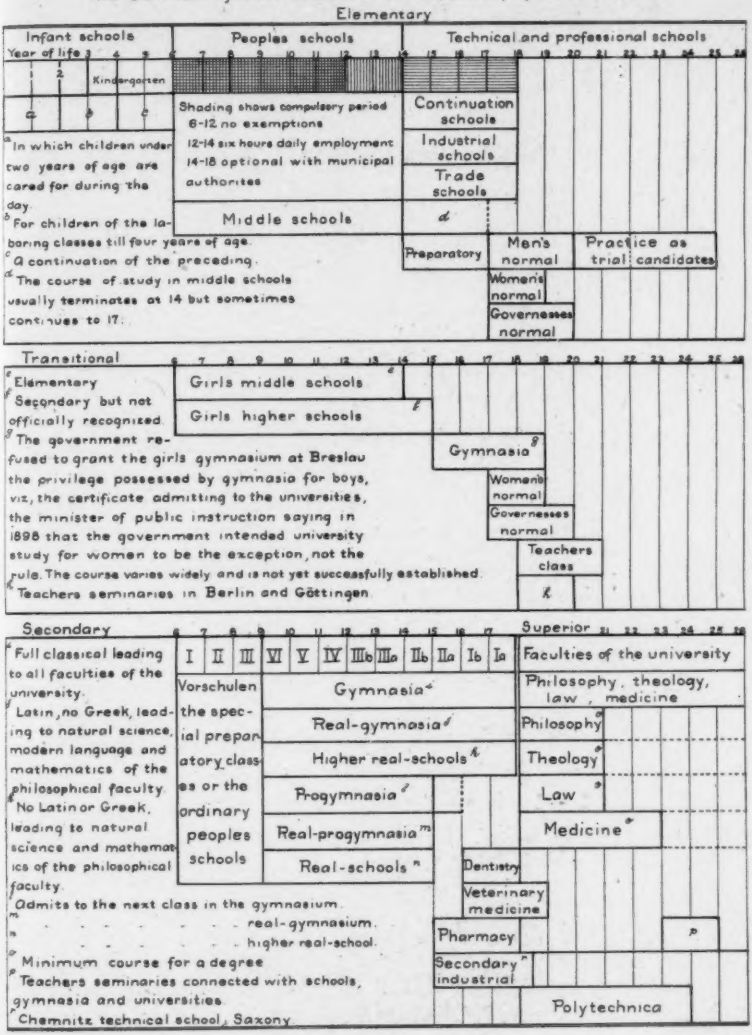


The German system of education as exemplified in Prussia


Elementary
Infant schools
Year of life 1 2 3 4 5 6
Kindergarten
a b c
Peoples schools
7 8 9 10 11 12 13 14
Shading shows compulsory period
6-12 no exemptions
12-14 six hours daily employment
14-18 optional with municipal authorities
Middle schools
Technical and professional schools
15 16 17 18 19 20 21 22 23 24 25 26
Continuation schools
Industrial schools
Trade schools
d
Preparatory
Men's normal
Practice as trial candidates
Women's normal
Governesses normal
a In which children under two years of age are cared for during the day.
b For children of the laboring classes till four years of age.
c A continuation of the preceding.
d The course of study in middle schools usually terminates at 14 but sometimes continues to 17.
Transitional
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26
Girls middle schools
Girls higher schools
Gymnasia
Women's normal
Governesses normal
Teachers class
e Elementary
f Secondary but not officially recognized.
g The government refused to grant the girls gymnasium at Breslau the privilege possessed by gymnasia for boys, viz, the certificate admitting to the universities, the minister of public instruction saying in 1898 that the government intended university study for women to be the exception, not the rule. The course varies widely and is not yet successfully established.
h Teachers seminaries in Berlin and Göttingen.
Secondary
6 7 8 9 10 11 12 13 14 15 16 17
I II III VI V IV IIIb IIIa IIb IIa Ib Ia
Vorschulen the special preparatory classes or the ordinary peoples schools
Gymnasia i
Real-gymnasia j
Higher real-schools k
Progymnasia l
Real-progymnasia m
Real-schools n
Superior
21 22 23 24 25 26
Faculties of the university
Philosophy, theology, law, medicine
Philosophy o
Theology o
Law o
Medicine o
Dentistry
Veterinary medicine
Pharmacy
Secondary industrial r
Polytechnica
i Full classical leading to all faculties of the university.
j Latin, no Greek, leading to natural science, modern language and mathematics of the philosophical faculty.
k No Latin or Greek, leading to natural science and mathematics of the philosophical faculty.
l Admits to the next class in the gymnasium.
m " " " real-gymnasium.
n " " " higher real-school.
o Minimum course for a degree
p Teachers seminaries connected with schools, gymnasia and universities.
r Chemnitz technical school, Saxony.